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FILE COVERS 1907 - 2 Dec 2009 VOL 151 ISS 23 FILE LAST UPDATED: 1 Dec 2009 (20091201/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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## http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 145 bib abs hitstr tot

L45 ANSWER 1 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2006:752371 HCAPLUS Full-text

DN 145:230657

- TI Disubstituted cucurbit[6]urils and preparing method thereof
- IN Ju, Jeong Min; Kim, Gi Mun; Lee, Jae Uk; Oh, Dong Hyeon

PA Postech Foundation, S. Korea

- SO Repub. Korean Kongkae Taeho Kongbo, No pp. given CODEN: KRXXA7
- Patent
- LA Korean

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	KR 2004069814	A	20040806	KR 2003-6356	20030130 <
PRAI	KR 2003-6356		20030130	<	
AB	Disubstituted	cucurbit [6]u	rils and	a preparing method thereof	are provided

Disubstituted cucurbit[6]urils and a preparing method thereof are provided, thereby easily introducing the substituents into cucurbit[6]urils, so that cucurbit[6]urils can be covalently bound to biochem. compds., solid surface and solid substrate. The method for preparing disubstituted cucurbit[6]urils comprises reacting glycolurils with formaldehyde.

283175-97-30P, derivs.

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(method for the preparation of disubstituted cucurbit[6]urils) 283175-97-3 HCAPLUS

RN

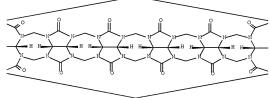
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1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer (CA INDEX NAME)

PAGE 1-A







PAGE 1-C

> 1

DN

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TT
    Photostabilisation of fluorescent dyes in the presence of cucurbiturils.
IN
   Nau, Werner; Mohanty, Jvotirmavee
    International University Bremen G.m.b.H., Germany
SO
    PCT Int. Appl., 38 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    German
FAN.CNT 1
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                              DATE
                                          APPLICATION NO.
    PATENT NO.
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

20080131

20090331

20050708

20040708

A1

B2

L45 ANSWER 2 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2006:53781 HCAPLUS Full-text

144:130396

US 20080023646

PRAI DE 2004-102004033050 A

WO 2005-EP53274 W

US 7511284

Photostability of aqueous solns. xanthene, cyanine, oxazine and coumarin dyes is increased in the presence of cucurbiturils without any essential changing of their absorption spectra and fluorescent quantum yields. Thus, adding 1-2 mmol cucurbit[7]uril to  $1-10~\mu m$  aqueous solution of rhodamine 6G increases its stability to laser irradiation (532 mm) in 30 - 5,000 times depending upon intensity of the irradiation

US 2007-631628

20070319 <--

PAGE 1-A

259886-50-5, Cucurbit[7]uril 259886-51-6, IT Cucurbit[8]uril 283175-97-3, Cucurbit[6]uril RL: MOA (Modifier or additive use); USES (Uses) (cucurbiturils as photostabilizers for fluorescent dyes)

259886-50-5 HCAPLUS RN

CN 2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19 a, 20a, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30aoctacosaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cvcloocta[1'''',2' ''',3''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'':

3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-cd:1', 2', 3'-gh]pentalene-1,4,6,8,10,12,14,16,19,21,23,25,27,29-tetradecone, tetradecahydro-,

stereoisomer (CA INDEX NAME)

Relative stereochemistry.

RN 259886-51-6 HCAPLUS

2,20:3,19-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a, 19, 20, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a, 31a, 32a, 33a, 34adotriacontaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cycloocta[1'''' ,2'''',3'''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3 '':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-

1,4,6,8,10,12,14,16,18,21,23,25,27,29,31,33-hexadecone, hexadecahydro-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A

283175-97-3 HCAPLUS RN

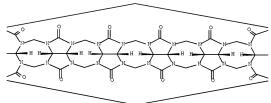
CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

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PAGE 1-A



PAGE 1-B



PAGE 1-C



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L45 ANSWER 3 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN
AN 2005:1330509 HCAPLUS Full-text
    144:40955
DN
TI
    Substances which release terpenes and/or terpene alcohols, for inhibiting
     adhesion of human-pathogenic fungi
TN
     Bockmuehl, Dirk; Breves, Roland; Weide, Mirko; Boy, Julia
PA
     Henkel Kommanditgesellschaft auf Aktien, Germany
SO
    PCT Int. Appl., 131 pp.
    CODEN: PIXXD2
    Patent
DT
LA German
FAN.CNT 1
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DE 102004028018 A1 20060608 DE 2004-102004028018 20040608 <--PRAI DE 2004-102004028018 A 20040608 <---

OS MARPAT 144:40955

AB

The invention relates to the use of substances, which release terpenes and/or terpene alcs., for reducing the adhesion of human-pathogenic microorganisms, such as Candida albicans, to biotic and abiotic surfaces, and to cosmetic or pharmaceutical prepns. containing these substances. Suitable terpenes and/or terpene alcs. are geraniol, farnesol, squalene, patchouli alc. and linalyl acetate. These terpenes and/or terpene alcs. are in the forms of esters with silicic acids oe acrylic polymers or in the form of inclusion complexes.

IT 80262-44-6D, Cucurbituril, inclusion complexes with terpenes and terpene alcs.

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(substances which release terpenes and/or terpene alcs., for inhibiting adhesion of human-pathogenic fungi)

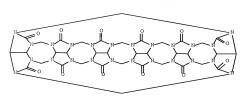
RN 80262-44-8 HCAPLUS

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g'h'lcvcloocta[1,2,3-cd:5,6,7-c'd'ldipentalene-

1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro- (CA INDEX NAME)



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 4 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:1259742 HCAPLUS Full-text

DN 144:39781

TI Disubstituted cucurbituril-bonded silica gel

IN Kim, Kimoon; Oh, Dong-Hyun; Erumaipatty Rajagounder, Nagarajan; Raju, Nandha Kumar; Choi, Ju-Young; Ko, Young-Ho

PA Postech Academy-Industry Foundation, S. Korea

SO PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DT Patent

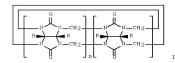
LA English FAN.CNT 1

FAN.CNT 1

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			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,		
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	WO	2005	-KR1	127		W		2005	0420											

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 144:39781

GI



AB A disubstituted cucurbituril-bonded silica gel and its use are provided. The disubstituted cucurbituril-bonded silica gel is useful for removal of air pollutants or water contaminants, and separation and purification of biol., organic, inorg., or ionic substances.

870684-87-0P тт 870671-46-8P

RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)

(disubstituted cucurbituril-bonded silica gel for removal of air pollutants or water contaminants, and separation and purification of biol., organic, inorg., or ionic substances)

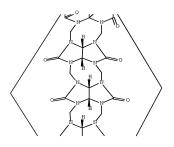
RN 870671-46-8 HCAPLUS

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Relative stereochemistry.

PAGE 1-A



PAGE 2-A



PAGE 3-A

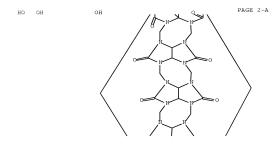
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11

PAGE 1-A

PAGE 1-B



IT 870684-88-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(disubstituted cucurbituril-bonded silica gel for removal of air pollutants or water contaminants, and separation and purification of biol., organic, inorg., or ionic substances)

RN 870684-88-1 HCAPLUS

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CM 1

CRN 870684-87-0

CMF C54 H68 N22 O20 Si2

13

PAGE 1-A

PAGE 1-B

CM 2

CRN 7631-86-9 CMF 02 Si

0-81-0

## RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 5 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:1259724 HCAPLUS Full-text

DN 144:11604

TI Preparation of liposome comprising a cucurbituril derivative

IN Kim, Kimoon; Lee, Hyung-Kun; Park, Kyung-Min; Jeon, Young-Jin; Oh, Dong-Hyun; Kim, Dongwoo

PA Postech Academy-Industry Foundation, S. Korea

SO PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

107 3000-10													
PATENT NO. KIND DATE APPLICATION NO.													
PI WO 2005112890 A1 20051201 WO 2005-KR1110	20050419 <												
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LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, M													
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, S													
SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, Y													
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, Z													
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, C													
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KR 2005102295 A 20051026 KR 2004-27577	20040421 <												
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PRAI KR 2004-27577 A 20040421 <													
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT													
OS MARPAT 144:11604													

A liposome formed by self-assembling a cucurbituril derivative and a method of preparing the liposome are provided. Liposomes further include a targeting molety exposed to the outside of the liposome. Organic compds., such as hydrocortisone, prednicolone, spironolactone, testosterone, megesterol acetate, danasole, progesterone, etc., a protein, or a gene are encapsulated as a guest mol. in the liposome. For example, 2.3 mg of [3-12-12-12-2-methoxyethoxy)ethoxylethylsulfanylpropyloxyll2 cucurbituril was dissolved in lm Lof Me alc. and the resultant solution was completely dried. About 6 mL of an aqueous solution containing 1 mg of hydrocortisone was added to the dried product, the temperature of a water bath was controlled to 40°and then the product was dispersed in the aqueous solution for 30 min by sonication. The formation of liposomes having sizes of several tens to 1000 nm was observed using a TEM.

IT 80262-44-8D, Cucurbituril, derivs.

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of liposomes by self-assembly of cucurbituril derivative)

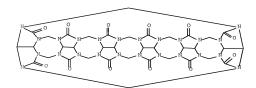
RN 80262-44-8 HCAPLUS

AB

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 13H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 44a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24a, 25a, 26a-tetracosaazabispentaleno[1'',6''';5'',6''',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6'':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-gh:1',3',3'-g'h']cycloocta[1,2,3-gh:1',3',3'-g'h']cycloocta[1,2,3-gh:1',3',3'-g'h']cyclooc

1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro- (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 6 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:1170684 HCAPLUS Full-text

DN 143:440450

TI Processes of preparing glycolurils and cucurbiturils using microwave irradiation

IN Kim, Kimoon; Samal, S.; Kumar, R. N.; Selvapalam, N.; Oh, Dong-Hyun

PA Postech Academy-Industry Foundation, S. Korea

SO PCT Int. Appl., 24 pp.

CODEN: PIXXD2

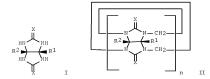
DT Patent

LA English

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WO 2005-KR1195 W					W		2005	U4Z6														

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS CASREACT 143:440450; MARPAT 143:440450

GI



Processes of preparing glycolurils, and for preparing cucurbiturils from the AB glycolurils or other cucurbiturils, both using microwave irradiation, are disclosed. The glycolurils are described by formula I, and the cucurbiturils by formula II [wherein: X = O, S, NH; R1, R2 = (independently) H, (un) substituted alk(en/yn)yl, alkylcarboxyl, hydroxyalkyl, alkoxy, nitroalkyl, (di)(alkyl)amino, (hetero)cycloalkyl, (hetero)aryl; n = 4-20]. Specifically, microwave irradiation allows a variety of condensation and cyclization reactions used for the preparation of industrially widely applied glycoluril and cucurbituril derivs, to be carried out efficiently in a short time. Applicable reactions include: (1) condensation and cyclization of 1,2dicarbonyl compds. with ureas to give glycolurils, (2) condensation and cyclization reactions between glycolurils and paraformaldehyde or formaldehyde solution to give cucurbiturils, (3) condensation and cyclization of disubstituted glycolurils with unsubstituted glycolurils to give disubstituted glycolurils, and (4) oxidation reactions of cucurbiturils for preparation of hydroxycucurbiturils. The condensing glycolurils can be cyclic-bridged glycolurils, such as I [R1R2 = (CH2)4]. For instance, simple cyclocondensation of urea with glyoxal in the presence of concentrated HCl was carried out in a reactor in an 800-W microwave for 15 s to give the solid parent glycoluril I [X = O, R1 = R2 = H] (III) in 85% yield. Further cyclization of III with paraformaldehyde in 9M H2SO4 with an irradiation time of 45 s, and recrystn. of the products, gave a series of 4 cucurbiturils II [X = 0, R1 = R2 = H, (IV): n = 5, 6, 7, 8] with yields of 15%, 45%, 20%, and 15%, resp. Similarly, mixed cyclization of an excess of the unsubstituted glycoluril III with the disubstituted glycoluril I [X = 0, R1 = R2 = mnitrophenyl] and paraformaldehyde in 12M H2SO4 (5 min, 800 W) gave the disubstituted hexameric cucurbituril II [X = 0, n = 6, R1 = R2 = H for 5 units, R1 = R2 = m-nitrophenyl for 1 unit| in 17% yield. The oxidation of unsubstituted hexameric cucurbituril IV [n = 6] with K2S2O8 in H2O (5 min, 800 W) gave II [X = 0, n = 6, R1 = R2 = OH] in 45% vield. Cvclocondensation of dimethylglycoluril I [X = O, R1 = R2 = Me] with paraformaldehyde in 9M H2SO4 (50 s, 800 W) gave 16% decamethylcucurbituril II [X = 0, n = 5, R1 = R2 = Me]. Finally, cyclocondensation of I [X = O, R1R2 = (CH2)4] with aqueous formaldehyde in the presence of HCl and H2SO4 (50 s, 800 W) gave cucurbiturils II [X = 0, n = 5 and 6, R1R2 = (CH2)4] in yields of 40% and 10%, resp.

283175-97-3P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (product and reactant; prepns. of glycolurils and cucurbiturils using microwave irradiation)

RN 283175-97-3 HCAPLUS

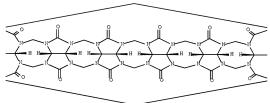
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PAGE 1-A



PAGE 1-B



PAGE 1-C



IT 143902-45-8P 259886-49-2P 259886-50-5P 259886-51-6P, Cucurbit[8]uril 558445-69-5P 864846-32-2P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(product; prepns. of glycolurils and cucurbiturils using microwave irradiation)

143902-45-8 HCAPLUS RN

CN 1H, 4H, 12H, 15H-2, 14:3, 13-Dimethano-

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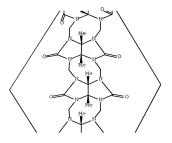
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2a, 13a, 15b, 16b, 17b, 18b, 19b, 20b, 21b, 22b-decamethyl-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A





PAGE 2-A



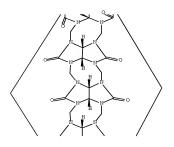
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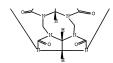
Relative stereochemistry.

PAGE 1-A





PAGE 2-A



PAGE 3-A

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1,4,6,8,10,12,14,16,19,21,23,25,27,29-tetradecone, tetradecahydro-,
stereoisomer (CA INDEX NAME)
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RN 259886-51-6 HCAPLUS

CN 2,20:3,19-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a,
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2'''',3'''';3'''',4''|pentaleno[1''',6''',5''',6''',7''']cycloocta[1'',2'',3
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stereoisomer (CA INDEX NAME)

PAGE 1-A

558445-69-5 HCAPLUS RN

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1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone,

dodecahydro-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-dodecahydroxy-, stereoisomer (CA INDEX NAME)

24

PAGE 1-A

PAGE 1-B

PAGE 1-C

RN 864846-32-2 HCAPLUS

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2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24a,25a,26a-tetracosaazabispentaleno[1'',6'':,5'',7'']cycloocta[1'',2''',3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone, 2a,26b-bis(3-nitrophenyl)-, stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-C

IT 868751-93-3 868751-94-4

RL: RCT (Reactant); RACT (Reactant or reagent) (product; prepns. of glycolurils and cucurbiturils using microwave irradiation)

RN 868751-93-3 HCAPLUS

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PAGE 1-A

RN 868751-94-4 HCAPLUS





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- AN 2005:1170646 HCAPLUS Full-text
- DN 143:441499
- TI Ultrathin polymer film using cucurbituril derivative and method of forming the same

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10 / 588846
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TN
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SO
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    English
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     WO 2005-KR1141
                         TAT
                                20050421
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     Provided are an ultrathin polymer film formed by homopolymn. or copolymn. of a
     cucurbituril derivative and a method of forming the same. The ultrathin
     polymer film has a thickness of 10 nm or less, and can retain its film shape
     even after being separated from a substrate.
     832153-10-3P 368594-60-9P
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (ultrathin polymer film using cucurbituril derivative and method of forming
        the same)
RN
     832153-10-3 HCAPLUS
CN
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     propenyloxy)-1H, 4H, 14H, 17H-2, 16:3, 15-dimethano-
     5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-
     2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
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CRN 558445-90-2 Relative stereochemistry.

CMF C72 H84 N24 O24

CM

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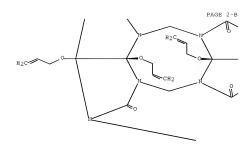


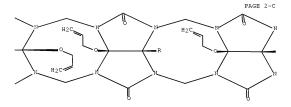
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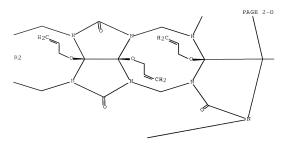


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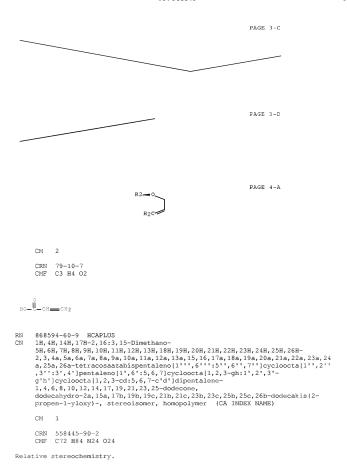


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PAGE 3-A





PAGE 1-B

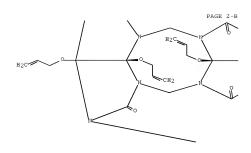


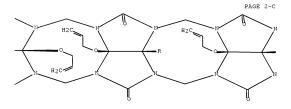
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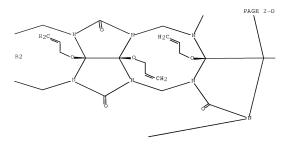


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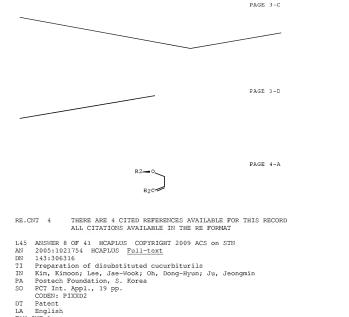


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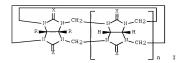
PAGE 3-A





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PRAI WO 2004-KR536 W 20040313 <-ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS CASREACT 143:306316; MARPAT 143:306316



AB Disubstituted cucurbituriis of formula I [X = 0, S, NH; R = alkenyl, carboxyalkyl, hydroxyalkyl, (substituted) aryl, etc.] are prepared The disubstituted cucurbituril has two end functional groups that can covalently bind with a solid substrate or a biochem. useful compound to obtain a cucurbituril-bounded substrate, which enables application of the disubstituted cucurbituril as column packing materials for chromatog., additives to gas separation membranes, catalysts for various chemical reactions, chemical sensors, biol. sensors or as drug carriers (no data). Thus, di-m-nitrobenzil and urea were mixed with RCl to give di-m-nitrophenylgivoluril, which was reacted with glycoluril and formaldehyde, and the product reduced to give di-m-aminophenylgucurbit[6] uril.

IT 664846-35-5P 864846-36-6P 864846-37-7P
RL: BUU (Biological use, unclassified); CAT (Catalyst use); MOA (Modifier or additive use); NUU (Other use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of disubstituted cucurbiturils)

N 864846-35-5 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

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RN 864846-36-6 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-

2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24a,25a,26a-tetracosaazabispentaleno[i'',6'':,5'',7'']cycloocta[i'',2'',3'':3',4']pentaleno[i',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone,2a,26b-bis(4-aminophenyl)-,stereoisomer (9CI) (CA INDEX NAME)

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RN 864846-37-7 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-DimethanoSH, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
a, 25a, 26a-tetracosaazabispentaleno[1''',6''':5'',6''',7'']cycloocta[1'',2''
3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene1,4,6,8,10,12,14,17,19,21,23,25-dodecone, 2a,26b-bis(4-hydroxyphenyl)-,
stereoisomer (9CI) (CA INDEX NAME)

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II 864846-32-2P 864846-33-3P 864846-34-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(preparation of disubstituted cucurbiturils)

RN 864846-32-2 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-23, 34H, 25H, 26H-23, 34H, 25H, 26H-23, 34H, 25H, 26H-23H, 26H-24H, 2

1,4,6,8,10,12,14,17,19,21,23,25-dodecone, 2a,26b-bis(3-nitrophenyl)-, stereoisomer (9CI) (CA INDEX NAME)

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RN 864846-33-3 HCAPLUS

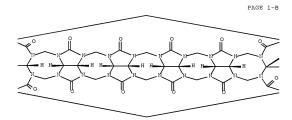
CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-

2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24a,25a,26a-tetracosaazabispentaleno[1'',6'':,5'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone, 2a,26b-bis(4-nitrophenyl)-, stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.

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RN 864846-34-4 HCAPLUS

8N 864846-34-4 HCAPLUS
18, 4H, 14H, 17H-2, 16:3, 15-Dimethano5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 19H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24a, 25a, 26a-tetracosaazabispentaleno[1",6":5",6",7"]cycloocta[1",2",3":3",4"]pentaleno[1",6":5,6,7]cycloocta[1,2,3-gh:1",2",3"g'h']cycloocta[1,2,3-cti5,6,7-c'd']dipentalene1,4,6,8,10,12,14,17,19,21,23,25-dodecone, 2a, 26b-bis(4-methoxyphenyl)-,

Relative stereochemistry.

stereoisomer (9CI) (CA INDEX NAME)

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RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 9 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:325695 HCAPLUS Full-text

DN 142:392447

TI Preparation of cucurbit[n]uril compounds and analogs, and methods of making and using the same

IN Isaacs, Lyle; Lagona, Jason Alan

PA University of Maryland, USA

SO U.S. Pat. Appl. Publ., 27 pp.

CODEN: USXXCO

Patent DT

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
PΙ	US 20050080068	A1	20050414	US 2004-933538	20040903 <			
	US 7335768	B2	20080226					
PRAI	US 2003-500115P	P	20030904	<				

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS CASREACT 142:392447

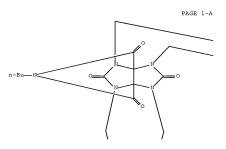
CN

- \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT \*
- AB A method for forming oligomers, i.e. cucurbit[n]uril compds. containing phthalhydrazide units in a macrocyclic wall thereof, comprises the step of reacting one or more phthalhydrazides or one or more compds. functionally equivalent there to with one or more glycoluril cyclic ethers. This method of preparing cucurbit-type compds. using bis(phthalhydrazides) as glycoluril surrogates controls the size, shape and pattern of functional groups in cucurbit[n]uril (i.e. CB[n]) forming reactions. The compds. are used advantageously to form host-guest complexes or cucurbit[6]uril-triotaxane compound Controlled oligomerization of compound (I) (R = COZEt) (10.00 g) with 5.25 g paraformaldehyde in the presence of 33.23 g p-MeC6H4SO3H in CICHECHECI at reflux for 2 h yielded a mixture of (II), (III), (IV), (V), and higher oligomers. Through a combination of selective dissoln. and chromatog. sepns., II 3.58, III 9.579, isomer of III 0.394, IV 0.026, V 0.164, and its isomer VI 0.120 g were obtained.
- IT 618906-31-3P
  RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP

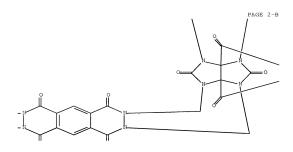
(Preparation); RACT (Reactant or reagent)
(preparation of cucurbit[n]uril compds. and analogs as host compds. for host-quest complexes or cucurbit[6]uril-trirotaxane compound)

RN 618906-31-3 HCAPLUS

30H, 33H, 35H, 41H, 47H, 53H, 59H, 65H-36, 40:42, 46:54, 58:60, 64-Tetramethano-2, 32:3, 31-dimetheno-6H, 8H, 10H, 12H, 14H, 16H, 20H, 22H, 24H, 26H, 28H, 37H, 40H, 43H, 49H, 55H, 58H, 61H-bispyrrolo[3]...., 4"...., 4"..., 5"."]pyrrolo[3]...., 4"..., 4"..., 5"."]pyradazino[1"..., 2"..., 1"..., 2"..., 1



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U U PAGE 3-B

IT 618903-34-7P 618903-36-9P 618903-37-0P 618906-26-6P 618906-28-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of cucurbit[n]uril compds. and analogs as host compds. for host-guest complexes or cucurbit[6]uril-trirotaxane compound)

RN 618903-34-7 HCAPLUS

CN 1H, 3H, 4H, 5H, 6H, 7H, 9H, 10H, 11H, 12H-2, 8-Dioxa-3a, 4a, 5a, 6a, 9a, 10a, 11a, 12a-octaaxadibenzo[gh,g'h']cycloocta[1, 2, 3-cd:5, 6, 7-c'd']dipentalene-10b, 10c, 12b, 12c-tetracarboxylic acid, 4,6,10,12-tetraoxo-, tetraethyl ester, (10bα, 10cα, 12bα, 12cα) - (9CI) (CA INDEX NAME)

RN 618903-36-9 HCAPLUS

CN 1H, 3H, 4H, 5H, 6H, 7H, 8H, 9H, 11H, 12H, 13H, 14H, 15H, 16H-2, 10-Dioxa-3a, 4a, 5a, 6a, 7a, 8a, 11a, 12a, 13a, 14a, 15a, 16a-dodecaazabisbenzo[3', 4']pentaleno[1', 6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-gh]pentalene-12b, 12c, 14b, 14c, 16b, 16c-hexacarboxylic acid, 4,6,8,12,14,16-hexacxo-, hexaethyl ester, (12ba, 12ca, 14ba, 14ca, 16ba, 16ca) - (9CI) (CA INDEX NAME)

RN 618903-37-0 HCAPLUS

CN 1H,3H,4H,9H,6H,7H,9H,10H,11H,12H-2,8-Dioxa-3a,4a,5a,6a,9a,10a,11a,12a-octaazadibenzo[gh,g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-10b,10c,12b,12c-tetracarboxamide, N,N',N'',N''''-tetrabutyl-4,6,10,12-tetraoxo-, (10ba,10ca,12ba,12ca)- (9CI) (CA INDEX NAME)

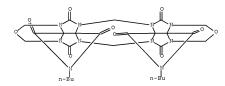
Relative stereochemistry.

PAGE 1-A

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- RN 618906-26-6 HCAPLUS
- CN 2H, 8H, 14H, 20H-1, 21:9, 13-Dimethano-4H, 6H, 10H, 16H, 18H, 22Hbis[1,3,5]oxadiazino[3',4':3,4]pyrrolo[3',4':4,5]imidazo[1,5-a:1',5'e][1,3,5,7]tetrazocine-6,10,12,18,22,24,25,26(11H,23H)-octone, 11,23-dibutyl-, (9aa,12aa,21aa,24aa)- (9CI) (CA INDEX NAME)



- RN 618906-28-8 HCAPLUS
- 1H, 4H, 18H, 21H-2, 20:3, 19-Dimethano-CN

5H, 6H, 9H, 10H, 11H, 12H, 13H, 14H, 17H, 22H, 23H, 26H, 27H, 28H, 29H, 30H, 31H, 34H-2,3,4a,5a,8a,9a,10a,11a,12a,13a,16a,17a,19,20,21a,22a,25a,26a,27a,28a,29a, 30a,33a,34a-tetracosaazabispentaleno[1',6':4,5,6]cyclohepta[1,2-i:1',2'i']cycloocta[1'''',2'''',3'''':3'',4''; 5'''',6'''',7'''':3''',4''']dipentaleno[1'',6'':4,5,6; 1''',6''':4',5',6']dicyclohepta[1,2-b:1',2'-b']dianthracene-

2a, 19a, 21b, 27b, 27c, 29b, 29c, 34b-octacarboxylic acid,

8,16,25,33-tetrahydro-1,4,6,8,10,12,14,16,18,21,23,25,27,29,31,33hexadecaoxo-, octaethyl ester, stereoisomer (9CI) (CA INDEX NAME)

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PAGE 1-B

0 0

-OEt

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\_\_ OEt

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IT 283175-97-30P, Cucurbit[6]uril, tri-rotaxane compound
618903-32-5P 618903-33-6P 618903-35-6P
618903-36-1P 618905-33-4P 618906-33-5P
859038-12-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
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RN 283175-97-3 HCAPLUS CN 1H,4H,14H,17H-2,16:3,15-Dimethano-

> 5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, <sup>7</sup>a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 1<sup>7</sup>a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1'',6':5',6'] ,3'':3',4']pentaleno[1',6':5,6,7]pycloocta[1,2,3-gh:1',2',3'-

g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

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> N

RN 618903-32-5 HCAPLUS

CN 1H, 3H, 4H, 5H, 6H, 7H, 9H, 10H, 11H, 12H-2, 8-Dioxa-3a, 4a, 5a, 6a, 9a, 10a, 11a, 12a-octaazadibenzo[gh, g'h']cycloocta[1, 2, 3-cd:5, 6, 7-c'd']dipentalene-10b, 10c, 12b, 12c-tetracarboxylic acid, 4, 6, 10, 12-tetracxo-, tetraethyl ester, (10bα, 10cα, 12bβ, 12cβ)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

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RN 618903-33-6 HCAPLUS

CN 1H, 3H, 4H, 5H, 6H, 7H, 9H, 11H, 12H, 13H, 14H-2, 8, 10-Trioxa-3a, 4a, 5a, 6a, 11a, 12a, 13a, 14a-octaazabenzo[gh]cycloocta[g'h']cycloocta[1, 2, 3cd:5, 6, 7-c'd']dipentalene-12b, 12c, 14b, 14c-tetracarboxylic acid, 4, 6, 12, 14-tetraoxo-, tetraethyl ester, (12bo, 12co, 14bo, 14co) - [9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 618903-35-8 HCAPLUS

CN 1H, 3H, 4H, 5H, 6H, 7H, 8H, 9H, 11H, 12H, 13H, 14H, 15H, 16H-2, 10-Dioxa-3a, 4a, 5a, 6a, 7a, 8a, 11a, 12a, 13a, 14a, 15a, 16a-dodecaazabisbenzo[3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-cd:1', 2', 3'-dh]pentaleno-12b, 12c, 14b, 14c, 16b, 16c-hexacarboxylic acid,

4,6,8,12,14,16-hexaoxo-, hexaethyl ester,  $(12b\alpha,12c\alpha,14b\beta,14c\beta,16b\alpha,16c\alpha)$ - (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 618903-38-1 HCAPLUS CN 1H.3H.4H.5H.6H.7H.9H

N 1H,3H,4H,5H,6H,7H,9H,10H,11H,12H-2,8-Dioxa-3a,4a,5a,6a,9a,10a,11a,12a-octaazadibenzo[gh,g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-10b,10c,12b,12c-tetracarboxylic acid, 4,6,10,12-tetraoxo-, (10ba,10ca,12ba,12ca) - (9CI) (CA INDEX NAME)

PAGE 2-A

RN 618906-32-4 HCAPLUS

CN 1H, 4H, 18H, 21H-2, 20:3, 19-Dimethano-

8,16,25,33-tetrahydro-1,4,6,8,10,12,14,16,18,21,23,25,27,29,31,33-

hexadecaoxo-, stereoisomer (9CI) (CA INDEX NAME)

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618906-33-5 HCAPLUS RN

CN 1H, 4H, 16H, 19H-2, 18:3, 17-Dimethano-

5H, 6H, 9H, 10H, 11H, 12H, 15H, 20H, 21H, 24H, 25H, 26H, 27H, 30H-

2, 3, 4a, 5a, 8a, 9a, 10a, 11a, 14a, 15a, 17, 18, 19a, 20a, 23a, 24a, 25a, 26a, 29a, 30a-

eicosaazabispentaleno[1',6':4,5,6]cyclohepta[1,2-i:1',2'-

i']pentaleno[1'',6'':4,5,6;3'',4'':4',5',6']dicyclohepta[1,2-b:1',2'-

b']dianthracene-2a, 17a, 19b, 25b, 25c, 30b-hexacarboxylic acid,

8,14,23,29-tetrahydro-1,4,6,8,10,12,14,16,19,21,23,25,27,29-tetradecaoxo-, hexaethyl ester, stereoisomer (9CI) (CA INDEX NAME)

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PAGE 1-B

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PAGE 2-C

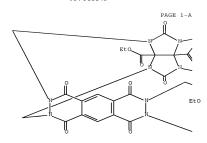
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PAGE 3-C

\_\_ OEt

RN 850038-12-9 HCAPLUS

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, 33H, 34H-2, 3, 4a, 5a, 6a, 7a, 6a, 9a, 12a, 13a, 14a, 15a, 16a, 17a, 19, 20, 21a, 22a, 23a, 2
4a, 25a, 26a, 29a, 30a, 31a, 32a, 33a, 34aoctacosazazbispentaleno[1''', 6''':5''', 6''', 7''']cycloocta[1''', 2'''
''', 3'''', 3'''', 4''']pentaleno[1''', 6''':5'', 6''', 7''']cycloocta[1'', 2'', 3'''
3', 4']pentaleno[1'', 6''', 5'', 6''', 7''']cycloocta[1'', 2'', 3'''
3', 4']pentaleno[1', 6'', 4, 5, 6]cyclohept[1, 2-b:1', 2''-i]anthracene2a, 19a, 21b, 23b, 23c, 25b, 25c, 31b, 31c, 33b, 33c, 34b-dodecacarboxylic acid,
12, 29-dihydro-1, 4, 6, 8, 10, 12, 14, 16, 18, 21, 23, 25, 27, 29, 31, 33-hexadecaoxo-,
dodecachyl ester, stereoisomer (9CI) (CA INDEX NAME)



10 / 588846 64 PAGE 1-C

PAGE 2-B Ц

PAGE 2-C Ц

OSC.G THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS) RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 10 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN 2005:238993 HCAPLUS Full-text

AN DN 142:316868

ΤI Novel synthetic binding pairs and uses thereof

Keinan, Ehud IN

PA Technion Research & Development Foundation Ltd., Israel

so PCT Int. Appl., 133 pp.

CODEN: PIXXD2

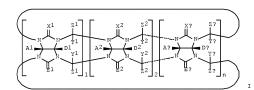
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DT Patent

LA English

FAN.	CNT	1																
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PI	WO 2005023816					A2 20050317			WO 2004-IL796						20040905 <			
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     CASREACT 142:316868; MARPAT 142:316868
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AB Cucurbituril assemblies I [Xn, En = 0, S, NR; R', An, Dn, Yn, Zn = H, Cl=20alkyl, C2=20-alkenyl, C2=20-alkynyl, Cl=20-alkoxy, Cl=20-aminoalkyl, C5=20cycloalkyl, C4=20-heteroalicyclyl, C6=20-aryl, C6=20-heteroaryl (with the
proviso that at least one of An or Dn = functional group for forming an
assembly); n = 5-20], polyamine structures capable of binding thereto,
affinity pairs of cucurbituril assemblies and such polyamine structures and
methods utilizing same are disclosed. Thus, cucurbit[6]uril [I; An = Dn = Yn
= Zn = H, En = Xn = 0, n = 1-6] was prepared from a mixture of glycouril and
dimethylcyclopentanoglycouril via cyclization with CH2O in the presence of
H2504, followed by affinity chromatog. Affinity pairing of I [An = Dn = Yn =
Zn = H, En = Xn = 0, n = 1-6] was accomplished with 2, 4-hexadiyne-1,6-diamine
dihydrochloride, 3-hexyne-1,6-diamine dihydrochloride and 2,4,6-octatriyne1,8-diamine dihydrochloride.

T 847977-84-8P

RN

GT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and amidation of, with protein derivative or benzenetriamine; preparation of cucurbituril assemblies and polyamine affinity pairs) 847977-84-8 HCAPLUS

CN Benzoic acid, 4-(decahydro-1,4,6,8,10,12,14,17,19,21,23,25-dodecaoxo-26b-phenyl-1H,4H,17H-2,16:3,15-dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24

66

a,25a,26a-tetracosaazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalen-2a(26bH)-yl)-, stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-B

IT 847924-30-5P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and crystal structure of; preparation of cucurbituril assemblies and

polvamine affinity pairs)

RN 847924-30-5 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

compd. with 2,4-hexadiyne-1,6-diamine dihydrochloride (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 283175-97-3 CMF C36 H36 N24 O12

Relative stereochemistry.

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CM 2

CRN 40710-24-5 CMF C6 H8 N2

H2N-CH2-C-C-C-CH2-NH2

IT 847904-22-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclization of, with glycouril; preparation of cucurbituril  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left($ 

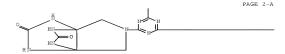
assemblies and polyamine affinity pairs)

RN 847924-22-5 HCAPLUS

CN 1H, 4H-3a, 6a-(Methaniminomethano)imidazo[4,5-d]imidazole-2,5(3H,6H)-dione, 8,8',8''-(1,3,5-triazine-2,4,6-triy1)tris- (9CI) (CA INDEX NAME)

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IT 847924-17-8DP, Amberlite XE-305-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of cucurbituril assemblies and polyamine affinity pairs) 847924-17-8 HCAPLUS

RN 847924-17-8 HCAPLUS CN 1H,4H,14H,17H-2,16:3,15-Dimethano-

> 5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1'',6''':5'',6'',7'']cycloocta[1'',2'',3'':1',3'',4']pentaleno[1',6''5,6,7]cycloocta[2,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']djepentalene-

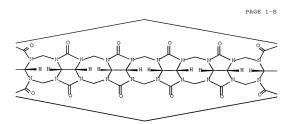
1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer, compd. with 1,5-pentanediamine (1:1), bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 283175-97-3 CMF C36 H36 N24 O12

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CM 2

CRN 462-94-2

CMF C5 H14 N2

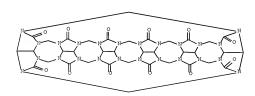
H2N-(CH2)5-NH2

CM 3

CRN 76-05-1

CMF C2 H F3 O2

259886-50-5P. 259886-49-2P, Cucurbit[5]uril Cucurbit[7]uril 259886-51-6P, Cucurbit[8]uril 283175-97-3F, Cucurbit[6]uril 307001-50-9P. 375372-76-2P 387353-44-8P, Cucurbit[10]uril 406498-90-6P 406498-91-7P Cucurbit [9]uril 686774-22-1P 834918-58-0P, Cucurbit[12]uril 847924-46-3P 847924-48-5P 847924-50-9P 847924-52-1P 847924-54-3P 847924-56-5P 847977-63-3P, Cucurbit[11]uril 847977-64-4P. Cucurbit [13]uril 847977-65-5P, Cucurbit[14]uril 847977-67-7P, 847977-66-6P, Cucurbit[15]uril Cucurbit [16]uril 847977-68-8P, Cucurbit[17]uril 847977-69-9F, Cucurbit[18]uril 847977-87-1DP, protein-bound amide 847997-42-6P, Cucurbit[19]uril 848088-96-0P 847997-67-5P, Cucurbit[20]uril 1021182-64-8P 1021182-65-9P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of cucurbituril assemblies and polyamine affinity pairs) 80262-44-8 HCAPLUS RN CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1''', 6''':5'', 6'', 7'']cvcloocta[1'', 2'' ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro- (CA INDEX NAME)



80262-44-8P, Cucurbituril 143902-45-3P

RN 143902-45-8 HCAPLUS

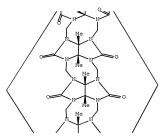
CN

1H, 4H, 12H, 15H-2,14:3,13-Dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 16H, 17H, 18H, 19H, 20H, 21H, 22H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,13,14,15a,16a,17a,18a,19a,20a,21a,22aeicosaazabispentaleno[1'',6''';5'',6''',7''];cyloocta[1'',2'',3'':3'',4']pe ntaleno[1',6':5,6,7']cycloocta[1,2,3-cd:1',2',3'-qh]pentalene-1,4,6,8,10,12,15,17,19,21-decone, decahydro-2a,13a,15b,16b,17b,18b,19b,20b,21b,22b-decomethyl-, stereoisomer (CA

INDEX NAME)

Relative stereochemistry.

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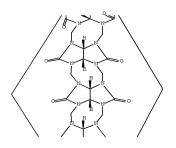
RN 259886-49-2 HCAPLUS

CN 1B, 4H, 12H, 15H-2, 14:3, 13-Dimethano5H, 6H, 7H, 8H, 9H, 10H, 11H, 16H, 17H, 19H, 19H, 20H, 21H, 22H2,3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 13, 14, 15a, 16a, 17a, 18a, 19a, 20a, 21a, 22aelcosaazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'':3'',4']pe
ntaleno[1',6':5,6,7]cycloocta[1,2,3-acd:1',2',3'-gh]pentalene1,4,6,8,10,12,15,17,19,21-decone, decahydro-, stereoisomer (CA INDEX NAME)

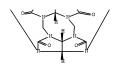
Relative stereochemistry.

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RN 259886-50-5 HCAPLUS CN 2,18:3,17-Dimethano-

N 2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19
a,20a,21a,22a,23a,24a,25a,26a,27a,28a,29a,30aoctacosaazabispentaleno[1'''',6'''':5''',6'''',7''']cycloocta[1'''',2''
'',3''':3'',4'']pentaleno[1'',6':5,6'',7'']cycloocta[1'',2'',3'':
3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-gh]pentaleno1,4,6,8,10,12,14,16,19,21,23,25,27,29-tetradecone, tetradecahydro-,
stereoisomer (CA INDEX NAME)

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259886-51-6 HCAPLUS CN

RN

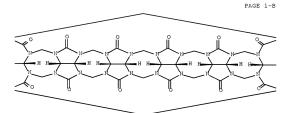
2,20:3,19-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a, 19, 20, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a, 31a, 32a, 33a, 34adotriacontaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cycloocta[1'''' ,2''',3''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3 '':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,16,18,21,23,25,27,29,31,33-hexadecone, hexadecahydro-, stereoisomer (CA INDEX NAME)

RN 283175-97-3 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24 a, 25a, 26a-tetracosaazabispentaleno[1''', 6''':5'', 6'', 7'']cycloocta[1'', 2'' ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer (CA INDEX NAME)

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```
RN 307001-50-9 HCAPLUS
CN 2,24:3,23-Dimethanotetracontaazabispentaleno[1'''',6'''':5''''',6'''''
...,7'''''|cycloocta[1'''',2''''',3''''';3'''',4''''|pentaleno[1'''']
```

''',6'''':5''',6''',7''']cycloocta[1''',2''',3''':3''',4''']pentale
no[1''',6''':5''',6'',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6':5,6,7
]cyclooct[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7c'd']dipentaleneicosone, eicosahydro-, stereoisomer (CA INDEX NAME)

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RN 375372-76-2 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 19H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
a, 25a, 26a-tetracosaazabispentaleno[1'', 6''':5''', 6''', 7'']cycloocta[1'', 2''
3'':3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-gh:1', 2', 3'g'h']cycloocta[1, 2, 3-cd:5, 6, 7-c'd']dipentalene1, 4, 6, 8, 1, 0, 12, 14, 17, 19, 21, 23, 25-dodecone,

dodecahydro-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-dodecamethyl-,

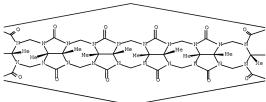
Relative stereochemistry.

stereoisomer (CA INDEX NAME)

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RN 387353-44-8 HCAPLUS

CN 1H, 4H, 20H, 23H-2, 22:3, 21-Dimethano-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 14a, 15a, 16a, 17a, 18a, 19a, 21, 22, 23a, 24

a, 25a, 26a, 27a, 28a, 29a, 30a, 31a, 32a, 33a, 34a, 35a, 37a, 38ahexatriacontaazabispentaleno[1'''''.6'''''.5''''',
loocta[1''''',2'''',3'''':3''',3''':3''',4''']pentaleno[1''',6''':5''',
fe'',7'''|cycloocta[1''',2''',3''':3'',3''',3''',4''']pentaleno[1'',6''':5',6',7'',0'cyloocta[1'',2'',3''':3'',4']pentaleno[1',6'',5',6']cycloocta[1',2'',3''cd:1',2',3'-gh]pentaleneoctadecone, octadecahydro-, stereoisomer (CA

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406498-90-6 HCAPLUS

RN

CN

8H, 20H, 29H, 36H, 43H, 50H-2, 26:30, 35:37, 42:44, 49-Tetramethano-7, 2a, 25a, 21-(methanonitrilomethanonitrilomethano)-1H, 10H, 12H, 14H, 16H, 18H, 27H, 35H, 42Hbisbenzimidazo[1'', ', ''':15'', 6''][1, 3, 5, 7]tetrazocino[1'', 2'':3', 3'a]benz imidazo[7'a, 1':6, 7][1, 3, 5, 7]tetrazocino[1, 2-c:2', 1''-i]benzimidazole-1,10,14,18, 27,52,53, 54,56,60-decone, eicosahydro- (CA INDEX NAME)

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RN 406498-91-7 HCAPLUS
8H, 24H, 33H, 40H, 47H, 54H, 61H-2, 30:34, 39:41, 46:48, 53:55, 60-Pentamethano7, 2a, 29a, 25-(methanonitrilomethanonitrilomethano)1H, 10H, 12H, 14H, 16H, 16H, 20H, 22H, 31H, 39H, 46H, 53Hbisbenzimidazo[1"', "'":3'', 5''] [1], 3, 5, 7] tetrazocino[1"', 2"':3', 3'a] benz
imidazo[7'a, 1':6, 7] [1, 3, 5, 7] tetrazocino[2, 1-i:2', 1'i'][1, 3, 5, 7] tetrazocino[1, 2-c:7, 6-c') [bisbenzimidazole-

1,10,14,18,22,31,63,64,65,66,68,72-dodecone, tetracosahydro- (CA INDEX NAME)

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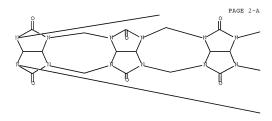
RN 686774-22-1 HCAPLUS

IN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-2a, 26b-propano5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
a, 25a, 26a-tetracosaazabispentaleno[1''',6''':5'',6''',7'']cycloocta[1'',2''
3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene1,4,6,8,10,12,14,17,19,21,23,25-dodecone, decahydro-28,28-dimethyl- (9CI)
(CA INDEX NAME)

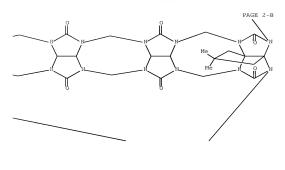
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RN 834918-58-0 HCAPLUS

CN Dodeca[(dihydro-2,5-dioxoimidazo[4,5-d]imidazole-1,3:4,6(2H,5H)-tetrayl)4,6-bis(methylene)] (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 847924-46-3 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5B, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 23H, 23H, 24H, 25H, 26H-2, 3, 44a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24a, 25a, 26a-tetracosaazabispentaleno[1'',6''':5'',6''',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6':5,6,7]cycloocta[2,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-gh:1',2'',3'',3'']cycloocta[1,2,3-gh:1',3'',3'',3'']cycloocta[1,2,3-gh:1',3'',3'',3'']cycloocta[1,2,3-gh:1',3'',3'',3'']cycloocta[1,2,3-gh:1',3'',3'',3'']cycloocta[1,2,3-gh:1',3'',3'',3'']cycloocta[1,2,3-gh:1',3'',3'',3'']cycloocta[1,2,3-gh:1',3'',3'',3'']cycloocta[1,2,3-gh:1',3'',3'',

 $\bar{1}$ ,4,6, $\bar{8}$ ,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer, compd. with 3-hexyne-1,6-diamine dihydrochloride (1:1) (9C1) (CA INDEX NAME)

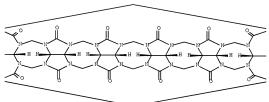
CM

CRN 283175-97-3 CMF C36 H36 N24 O12

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PAGE 1-C



CM 2

CMF C6 H12 N2  ${\tt H} \; {\tt 2} \; {\tt N} \longrightarrow {\tt C} \; {\tt H} \; {\tt 2} \longrightarrow {\tt C} \; {\tt M} \; {\tt C} \longrightarrow {\tt C} \; {\tt C} \longrightarrow {\tt C} \; {\tt M} \; {\tt C} \longrightarrow {\tt C} \; {\tt C} \longrightarrow {\tt C$ 847924-48-5 HCAPLUS BN CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24 a, 25a, 26a-tetracosaazabispentaleno[1''', 6''':5'', 6''', 7'']cycloocta[1''', 2'' ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer, compd. with 6-(1-pyrrolidinyl)-2,4-hexadiyn-1-amine hydrochloride (1:1:2) (CA INDEX NAME) CM 1 CRN 847924-47-4 CMF C10 H14 N2 H2-C-C-C-CH2-NH2

CM 2

CRN 283175-97-3 CMF C36 H36 N24 O12

Relative stereochemistry.

CRN 262852-94-8

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> N

RN 847924-50-9 HCAPLUS

CN 1H, 4H, 14H, 17H-2,16:3,15-Dimethano5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 19H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
a, 25a, 26a-tetracosaaxabispentaleno[1'',6''';5'',6'',7'']cycloocta[1'',2'',3''-3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer,

1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer, compd. with 6-(3,4-dihydro-2(1H)-isoquinolinyl)-2,4-hexadiyn-1-amine dihydrochloride (1:1) (9C1) (CA INDEX NAME)

CM 1

CRN 847924-49-6 CMF C15 H16 N2

CM 2

CRN 283175-97-3 CMF C36 H36 N24 O12

Relative stereochemistry.

PAGE 1-A



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RN 847924-52-1 HCAPLUS
CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-
SH, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-
2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
a, 25a, 26a-tetracosaazabispentaleno[1",6":5",6";7"];0;c)loocta[1",2",3":3",4"]pentaleno[1",6":5,6,7]cycloocta[1,2,3-gh:1",2",3"-
g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer, compd. with 2,4,6-octatriyne-1,8-diamine dihydrochloride (1:1) (9CI) (CA
INDEX NAME)

CM 1

CRN 847924-51-0
```

H2N-CH2-C-C-C-C-C-CH2-NH2

CM 2

CRN 283175-97-3 CMF C36 H36 N24 O12

Relative stereochemistry.

CMF C8 H8 N2

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CN

RN 847924-54-3 HCAPLUS

18,48,13H,17H-2,16:3,15-Dimethano\$\$ \$16,6H,7B,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24a,25a,26a-tetracosaazabispentaleno[1'',6''':5'',6'',''']eycloocta[1'',2''
3''':3',4']pentaleno[1',6':5,6,7]eycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer, compd. with N-(5-aminopentyl)-2,4-hexadiyne-1,6-diamine trihydrochloride
(1:1) (9C1) (CA INDEX NAME)

CM

CRN 847924-53-2 CMF C11 H19 N3  ${\tt H}\,{\tt 2}\,{\tt N}\,{-}\,{\tt C}\,{\tt H}\,{\tt 2}\,{-}\,{\tt C}\,{=}\!{=}\!{=}\!{=}\!{C}\,{-}\,{\tt C}\,{\tt H}\,{\tt 2}\,{-}\,{\tt N}\,{\tt H}\,{-}\,\,({\tt C}\,{\tt H}\,{\tt 2})\,\,{\tt 5}\,{-}\,{\tt N}\,{\tt H}\,{\tt 2}$ 

CM 2

CRN 283175-97-3 CMF C36 H36 N24 O12

Relative stereochemistry.

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RN 847924-56-5 HCAPLUS CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1''', 6''':5'', 6''', 7'']cycloocta[1'', 2'' ,3'':3',4'|pentaleno[1',6':5,6,7]cvcloocta[1,2,3-qh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-

1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer, compd. with N-[6-(3,4-dihydro-2(1H)-isoquinoliny1)-2,4-hexadiyny1]-1,5pentanediamine trihydrochloride (1:1) (9CI) (CA INDEX NAME)

CM

1

CRN 847924-55-4 CMF C20 H27 N3

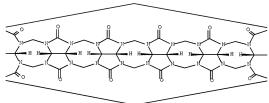
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CRN 283175-97-3 CMF C36 H36 N24 O12

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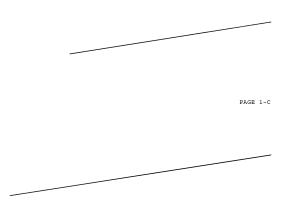
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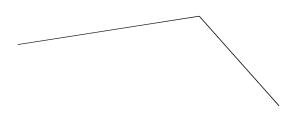
RN 847977-63-3 HCAPLUS

CN Undeca[cis-dihydro-2,5-dioxoimidazo[4,5-d]imidazole-1,3:4,6(2H,5H)-tetrayl)-4,6-bis(methylene)] (CA INDEX NAME)

PAGE 1-B







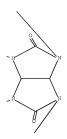
PAGE 1-E

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PAGE 2-D





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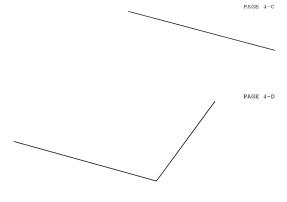
PAGE 3-C



PAGE 3-D



PAGE 3-E



RN 847977-64-4 HCAPLUS

CN Trideca[(cis-dihydro-2,5-dioxoimidazo[4,5-d]imidazole-1,3:4,6(2H,5H)-tetrayl)-4,6-bis(methylene)] (CA INDEX NAME)

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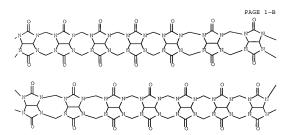
PAGE 2-C

RN 847977-65-5 HCAPLUS

CN Tetradeca[(cis-dihydro-2,5-dioxoimidazo[4,5-d]imidazole-1,3:4,6(2H,5H)-tetrayl)-4,6-bis(methylene)] (CA INDEX NAME)

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RN 847977-66-6 HCAPLUS

CN Pentadeca[(cis-dihydro-2,5-dioxoimidazo[4,5-d]imidazole-1,3:4,6(2H,5H)-tetrayl)-4,6-bis(methylene)] (CA INDEX NAME)

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PAGE 2-A

PAGE 2-C

RN 847977-67-7 HCAPLUS

CN Hexadeca[(cis-dihydro-2,5-dioxoimidazo[4,5-d]imidazole-1,3:4,6(2H,5H)-tetrayl)-4,6-bis(methylene)] (CA INDEX NAME)

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PAGE 1-C

PAGE 2-A

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RN 847977-68-8 HCAPLUS

CN Heptadeca[(cis-dihydro-2,5-dioxoimidazo[4,5-d]imidazole-1,3:4,6(2H,5H)-tetrayl)-4,6-bis(methylene)] (CA INDEX NAME)

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PAGE 1-C

RN 847977-69-9 HCAPLUS

CN Octadeca [(cis-dihydro-2,5-dioxoimidazo[4,5-d]imidazole-1,3:4,6(2H,5H)-tetrayl)-4,6-bis(methylene)] (CA INDEX NAME)

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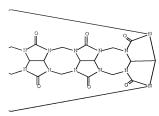


PAGE 1-C

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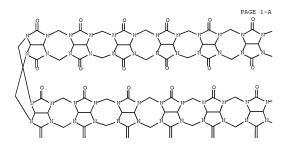
847977-87-1 HCAPLUS CN Benzamide, 4-(decahydro-1,4,6,8,10,12,14,17,19,21,23,25-dodecaoxo-26bphenyl-1H, 4H, 14H, 17H-2, 16:3, 15-dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1''', 6''':5'', 6'', 7'']cycloocta[1'', 2'' ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalen-2a(26bH)-y1)-, stereoisomer (9CI) (CA INDEX NAME)

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RN 847997-42-6 HCAPLUS

CN Nonadeca[(cis-dihydro-2,5-dioxoimidazo[4,5-d]imidazole-1,3:4,6(2H,5H)-tetrayl)-4,6-bis(methylene)] (CA INDEX NAME)



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RN 847997-67-5 HCAPLUS

ij

IJ

CN Eicosa[(cis-dihydro-2,5-dioxoimidazo[4,5-d]imidazole-1,3:4,6(2H,5H)-tetrayl)-4,6-bis(methylene)] (CA INDEX NAME)

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RN 848088-96-0 HCAPLUS

CN 1B, 4H, 14H, 17H-2a, 26b- (Methaniminomethano) -2, 16:3, 15-dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaaxabispentaleno(1",6":5",6",7") [cycloocta[1,2,3-gh:1',2",3"g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,2a,25-dodecone, 28,28",28"-(1,3,5-triazine-2,4,6-triy1) tris[decahydro-, stereoisomer (9C1)

- \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*
- RN 1021182-64-8 HCAPLUS
- CN Benzoic acid, 4,4'-[(decahydro-1,4,6,8,10,12,14,17,19,21,23,25-dodecaoxo-1H,4H,17H-2.16:3,15-dimethano-

5H, 6H, 7H, 6H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2,3, 4a,5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15; 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'':3'',3'';3',4']pentaleno[1',6'';5,6,7]cycloocta[1,2,3-gh;1',2',3'g'h']cycloocta[1,2,3-cd;5,6,7-c'd']dipentalene-2a,26b-diy1)bis[4,1-

phenylene (decahydro-1,4,6,8,10,12,14,17,19,21,23,25-dodecaoxo-1H,4H,14H,17H-2,16:3,15-dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 13H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24a, 25a, 26a-tetracosaazabispentaleno[1'',6''':5'',6'',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6'':5,6,7]cycloocta[1,2,3-gh:1',2'',3'-dh']cycloocta[1,2,3-gh:1',3-gh:1',3-gh:1',3-gh:1',3-gh:1',3-gh:1',3-gh:1'',3-gh

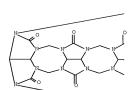
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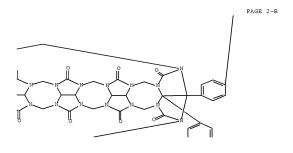
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10 / 588846 119 PAGE 2-A







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## RN 1021182-65-9 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24

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a, 25a, 26a-tetracosaazabispentaleno[1''',6''':5''',6''',7'']cvcloocta[1'',2''
     ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
     g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
     1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone,
     2a, 26b: 2'a, 26'b: 2'a, 26'b-(1, 12, 4, 5, 8, 9-triphenylenehexayl) tris[decahydro-
     , stereoisomer (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT 847977-83-7P
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation, N-cvanation and trimerization of; preparation of cucurbituril
        assemblies and polyamine affinity pairs)
     847977-83-7 HCAPLUS
    1H, 4H, 14H, 17H-2a, 26b-(Methaniminomethano)-2, 16:3, 15-dimethano-
     5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-
     2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
     a, 25a, 26a-tetracosaazabispentaleno[1''',6''':5''',6''',7'']cycloocta[1'',2''
     ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
```

1,4,6,8,10,12,14,17,19,21,23,25-dodecone, decahydro-, stereoisomer (9CI)

g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-

RN

CN

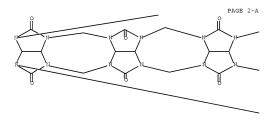
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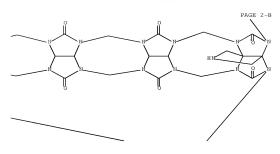
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IT 847977-82-6D, probe-bound amide
RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with protein bound polyamine; preparation of cucurbituril assemblies and polyamine affinity pairs)

RN 847977-82-6 HCAPLUS

CN Pentanamide, 5-[[4,6-bis(decahydro-1,4,6,8,10,12,14,17,19,21,23,25-dodecaoxo-1H,4H,14H,17H-2a,26b-(methaniminomethano)-2,16:3,15-dimethano-5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24a,25a,26a-tetracosaazabispentaleno[1'',6'':5,'',6'',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6'':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h'!cycloocta[1,2,3-cd:5,6,7-c'd']dipentalen-28-y1)-1,3,5-triazin-2-y1lamino]-, stereoisomer (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 11 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN AN 2005:158568 HCAPLUS Full-text

DN 142:236090

TI Molecular probe and material based on 1-phenyl-1-propyne for the detection of an analyte

IN Wessig, Pablo; Schedler, Uwe

PA Germany

SO PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DT Patent

LA German FAN.CNT 1

300010																			
	PATENT NO.					KIN		DATE		APPLICATION NO.									
ΡI	WO					A2				WO 2004-EP8781									
		W:	AE, CN, GE, LK, NO, TJ, BW, AZ, EE,	AG, CO, GH, LR, NZ, TM, GH, BY, ES,	AL, CR, GM, LS, OM, TN, GM, KG,	AM, CU, HR, LT, PG, TR, KE, KZ,	AT, CZ, HU, LU, PH, TT, LS, MD, GB,	AU, DE, ID, LV, PL, TZ, MW, RU, GR, CF,	AZ, DK, IL, MA, PT, UA, MZ, TJ,	DM, IN, MD, RO, UG, NA, TM, IE,	DZ, IS, MG, RU, US, SD, AT, IT,	EC, JP, MK, SC, UZ, SL, BE, LU,	EE, KE, MN, SD, VC, SZ, BG, MC,	EG, KG, MW, SE, VN, TZ, CH, NL,	ES, KP, MX, SG, YU, UG, CY, PL,	FI, KR, MZ, SK, ZA, ZM, CZ, PT,	GB, KZ, NA, SL, ZM, ZW, DE, RO,	GD, LC, NI, SY, ZW AM, DK, SE,	
				TD,		DI,	ъ,	CI,	ca,	01,	CII,	Ori,	GI4,	uç,	GH,	ты,	PHC,	иш,	
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FRAI																			
		WO 2004-EP8781 W 20040805 <																	

AB The invention relates to a mol. probe (MS) for detecting an analyte (AN), comprising: a basic structure (GS); at least two groups of detectors (DI, D2) that are directly or indirectly bound to the basic structure (GS) and can simultaneously interact with the analyte (AN); at least two groups of signals (SI, S2) which are directly or indirectly bound to the basic structure (GS); at least one signaling conformation of the mol. probe (MS), in which the groups of signals (SI, S2) interact with each other in such a way that a detectable signal is generated; and at least one mute conformation in which the detectable signal is not generated. The inventive probe combines the functions required for detecting an analyte, i.e. detection, signal transduction, and signal generation, and can be easily adapted to different detection problems as a result of the modular structure thereof.

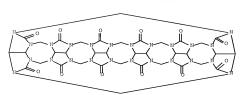
80262-44-8, Cucurbituril
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (mol. probe and material based on 1-phenyl-1-propyne for detection of

an analyte)

RN 80262-44-8 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro- (CA INDEX NAME)



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS) RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 12 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

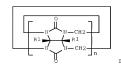
AN 2005:99542 HCAPLUS Full-text

142:177710 DN

- ΤI Cucurbituril-containing polymer and monolithic column and stationary phase of column chromatography prepared thereby
- Kim, Kimoon; Oh, Dong-Hyun; Nagarajan, Erumaipatty Rajagounder; Ko, IN Young-Ho; Samal, Shashadhar
- PA Postech Foundation, S. Korea
- SO PCT Int. Appl., 23 pp.
- CODEN: PIXXD2
- DT Patent
- LA English

PATENT NO.						KIND DATE			APPLICATION NO.											
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PRAI																				
		2004 ENT H																		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT GT



AB A cucurbituril-containing polymer, in which a particle-type polymer with a reactive end-substituted group is linked to a cucurbituril derivs. (I) (n=4-20 integer, Rl = C2-20 alkenyloxy group with unsatd. end bond, C2-20 carboxyalkylsulfanyloxy group, C2-8 carboxyalkyloxy group, C1-8 aminoalyloxy, C1-8 hydroxyalkyloxy group, or C2-8 epoxyalkyloxy group) by a covalent bond. A stationary phase for column chromatog, and a monolithic column using the above polymer is also provided. Thus, a chlorine-containing Merrifield

polymer was reacted with a cucurbituril derivative (I) with n = 6 and R1 = 2hydroxyethyloxy group in the presence of potassium carbonate to receive a polymer particle.

IT 558445-90-2P
RI: IMF (Industrial manufacture); POF (Polymer in formulation); RCT
(Reactant); TEM (Technical or engineered material use); PREP

(Preparation); RACT (Reactant or reagent); USES (Uses) (cucurbituril-containing polymer for monolithic column and stationary phase of column chroatog.)

RN 558445-90-2 HCAPLUS

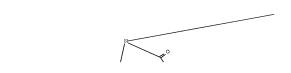
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Relative stereochemistry.

PAGE 1-B

127

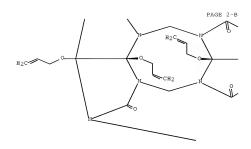


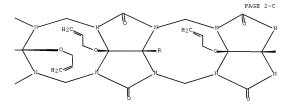
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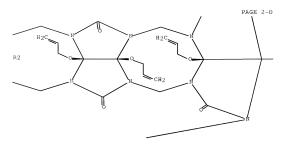


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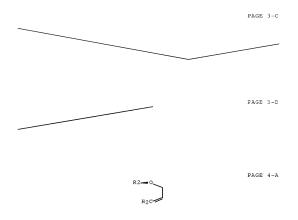


PAGE 2-E



PAGE 3-A





832153-10-3DP, polymers with cucurbituril derivs., reaction products with aminopropylated silica gel 832153-11-4P RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (cucurbituril-containing polymer for monolithic column and stationary phase of column chroatog.) RN 558446-01-8 HCAPLUS CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1''', 6''':5'', 6''', 7'']cycloocta[1'', 2'' ,3'':3',4']pentaleno[1',6':5,6,7]cvcloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-dodecakis (2-

hydroxyethoxy)-, stereoisomer (9CI) (CA INDEX NAME)

558446-01-80P, reaction products with chlorine-containing polymer particles 832153-09-0DP, reaction products with silica gel

Relative stereochemistry.

131

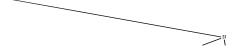
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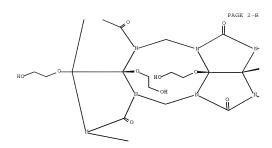


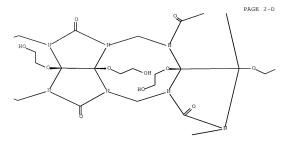
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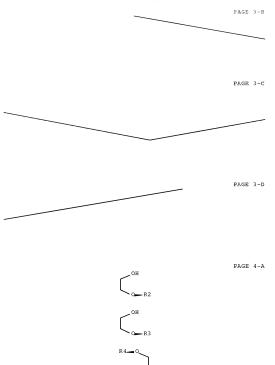


PAGE 2-E

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PAGE 3-A





RN 832153-09-0 HCAPLUS

CN

dodecahydro-2a,15a,17b,19b,19c,21b,21c,23b,23c,25b,25c,26b-dodecakis(2propenyloxy)-, stereoisomer, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 558445-90-2 CMF C72 H84 N24 O24

Relative stereochemistry.

PAGE 1-B



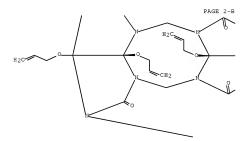
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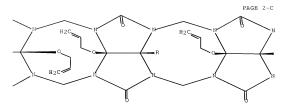


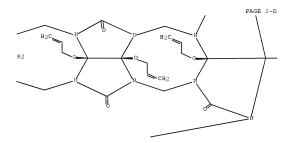
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136









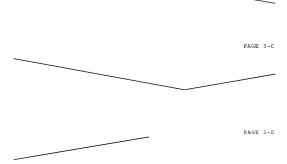
PAGE 2-E



138 PAGE 3-A

PAGE 3-B







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CRN 100-42-5

CMF C8 H8

Hoc-Ph

RN 832153-10-3 HCAPLUS

CN 2-Propenoic acid, polymer with stereoisomer of dodecahydro-2a,15a,17b,19b,19c,21b,21c,23b,23c,25b,25c,26b-dodecakis(2propenyloxy)-1H,4H,14H,17H-2,16:3,15-dimethano-5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-

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g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone (9CI) (CA INDEX NAME)

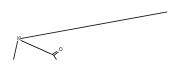
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CRN 558445-90-2

CMF C72 H84 N24 O24

Relative stereochemistry.

PAGE 1-B

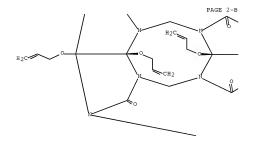


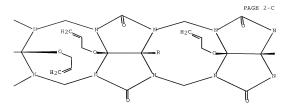
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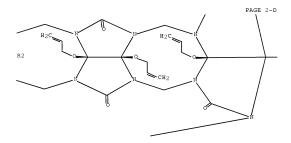


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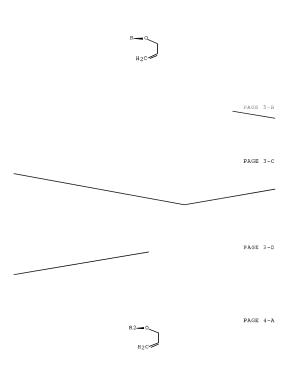


PAGE 2-E

°**√**CH2

PAGE 3-A

142



CM 2

CRN 79-10-7

CMF C3 H4 O2



RN 832153-11-4 HCAPLUS

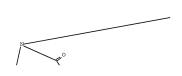
CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with
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a,25a,26a-tetracosaazabispentaleno[1''',6''':5'',6'']cycloocta[1'',2''
,3'''3',4']pentaleno[1',6':5,6',7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene1,4,6,8,10,12,14,17,19,21,23,25-dodecone (9CI) (CA INDEX NAME)

CM

CRN 558445-90-2 CMF C72 H84 N24 O24

Relative stereochemistry.

PAGE 1-B

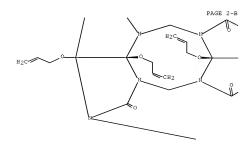


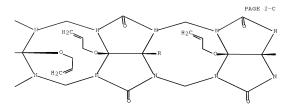
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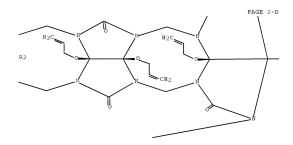


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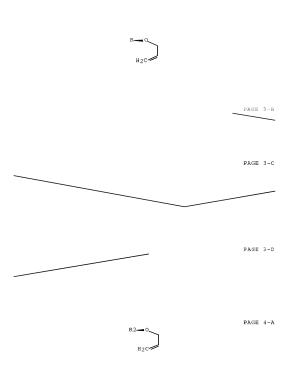


PAGE 2-E



PAGE 3-A

146



CM 2

CRN 6342-17-2 CMF C10 H14 N2 O2

CM 3

CRN 2530-85-0 CMF C10 H20 O5 Si

CM 4

CRN 79-06-1 CMF C3 H5 N O

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS) RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 13 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:99504 HCAPLUS Full-text

DN 142:183488

TI Nanoparticles comprising cucurbituril derivatives

IN Kim, Kimoon; Jon, Sang-Yong; Jeon, Young-Jin; Oh, Dong-Hyun; Selvapalam, Narayanan

PA Postech Foundation, S. Korea

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
   MARPAT 142:183488
OS
AB
    Provided are nanoparticles prepared by the aggregation of cucurbituril derivs.
     and having a particle size of 1 to 1000 nm, a pharmaceutical composition in
     which a pharmaceutically active substance is loaded into the nanoparticles,
     and preparation methods thereof. Nanoparticles were prepared from
     octanesulfanylpropyloxycucurbit[12]uril, poly(lactic acid) and hydrocortisone.
    834918-58-00, octv1sulfanvlpropoxy derivs.
    RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP
    (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC
    (Process); USES (Uses)
        (nanoparticles comprising cucurbituril derivs.)
RN
    834918-58-0 HCAPLUS
CN
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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
OSC.G 3
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RE.CNT 6
             THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
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L45 ANSWER 14 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN
AN
    2005:34927 HCAPLUS Full-text
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ΤI
    Cucurbituril derivative-bonded solid substrate and biochip using the same
    Kim, Kimoon; Kang, Jin-Koo; Jeon, Woo-Seong; Jon, Sang-Yong; Narayanan,
TN
    Selvapalam; Oh, Dong-Hyun
    Postech Foundation, S. Korea
PA
SO
    PCT Int. Appl., 31 pp.
    CODEN: PIXXD2
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FAN.CNT 1
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

- AB Provided is a cucurbituril derivative-bonded solid substrate in which a cucurbituril derivative is covalently bonded to a modified solid substrate. A protein chip, a gene chip, and a sensor for biomaterial assay using the cucurbituril derivative-bonded solid substrate are also provided.
- IT 80262-44-8D, Cucurbituril, derivs.
  - RL: DEV (Device component use); USES (Uses)
- (cucurbituril derivative-bonded solid substrate and biochip using the same)
- RN 80262-44-8 HCAPLUS
- CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-
- OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
  RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
  - ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L45 ANSWER 15 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN
- AN 2005:29337 HCAPLUS Full-text
- DN 142:110092
- TI Rotaxane compound, rotaxane-bonded solid substrate, and biochip using the same
- IN Kim, Kimoon; Kang, Jin-Koo; Jeon, Woo-Seong; Noh, Miran; Kim, Dongwoo
- PA Postech Foundation, S. Korea
- SO PCT Int. Appl., 25 pp.

Patent LA English FAN.CNT 1 APPLICATION NO. PATENT NO. KIND DATE DATE A1 20050113 WO 2004-KR1651 WO 2005003136 20040705 <--W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG KR 2005005581 20050114 KR 2003-45522 EP 2004-774077 20030705 <--EP 1644379 A1 20060412 20040705 <--R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK 20070802 JP 2006-518541 20040705 <--US 20060154254 A1 20060713 US 2006-563477 20060105 <--US 7611888 B2 20091103 PRAI KR 2003-45522 KR 2003-45522 A WO 2004-KR1651 W 20030705 <--20040705 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Provided is a compound represented by Formula 1 in which a compound of Formula 3 vertically passes through a cavity of cucurbituril or its derivative of Formula 2. Provided are also a solid substrate bonded with the compound and a biochio including the solid substrate.

IT 283175-97-3, Cucurbit[6]uril

RL: RCT (Reactant); RACT (Reactant or reagent)

(rotaxane compound, rotaxane-bonded solid substrate, and biochip using thesame)

RN 283175-97-3 HCAPLUS

CODEN: PIXXD2

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24a,25a,26a-tetracosaazabispentaleno[1'',6''':5'',6''',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1'',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer (CA

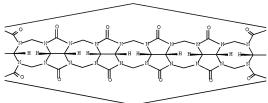
1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer (CFINDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 1-B



PAGE 1-C



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 5 THERE ARE 5 CITED REFRENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

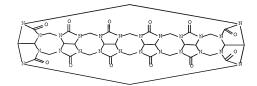
- L45 ANSWER 16 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN
- AN 2004:905494 HCAPLUS Full-text
- DN 141:328101
- TI Rapid sequencing of liner polymers by formation of rotaxane
- IN Bension, Rouvain
- PA (
- SO U.S. Pat. Appl. Publ., 8 pp.
- CODEN: USXXCO
- DT Patent
- LA English

FAN	.CNT	1	

THI. CIT								
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE				
PI US 20040214177	A1	20041028	US 2003-421343	20030423 <				
US 7163658	B2	20070116						
PRAI US 2003-421343		20030423	<					

AB The invention provides a method and device for sequencing at least a fragment of a linear polymer. The device comprises a well for placement of a rotaxane comprising the combination of a cyclic mol. and a linear polymer threaded through said cyclic mol; a probe having the ability to move the linear polymer relative to the cyclic mol. while producing a signal resulting from the interaction of the cyclic mol. and a unit attached to the polymer; and means for reading said signal. The process comprises formation of the rotaxane, attachment of the probe, movement of the cyclic mol. relative to the linear polymer and the reading of signals. The device and method are especially useful for the sequencing of DNA.

- IT 80262-44-8, Cucurbituril
  - RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (rapid sequencing of liner polymers by formation of rotaxane)
- RN 80262-44-8 HCAPLUS
- CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-
  - 5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24 a,25a,26a-tetracosaazabispentaleno[1'',6':5'',6'',7'']cycloocta[1'',2'' ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
  - g'h']cvcloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
  - 1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro- (CA INDEX NAME)



## OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

- L45 ANSWER 17 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN
- AN 2004:701849 HCAPLUS Full-text
- DN 141:207239

- Preparation of cucurbituril-fullerene complex TI
- IN Geckeler, Kurt E.; Constabel, F.
- Kwangju Institute of Science and Technology, S. Korea PA SO U.S. Pat. Appl. Publ., 5 pp.
  - CODEN: USXXCO
  - Patent
- English

LIFE	Birg	1110
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	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 20040167328	A1	20040826	US 2003-667221	20030917 <
	US 7122664	B2	20061017		
	KR 2004076302	A	20040901	KR 2003-11583	20030225 <
	JP 2004256512	A	20040916	JP 2003-292738	20030813 <
	DE 10350280	A1	20040916	DE 2003-10350280	20031028 <
PR/	I KR 2003-11583	A	20030225	<	

AB

The present invention relates to a complex composed of cucurbituril and fullerene and a method for manufacturing the complex on a solid-phase. A complex in accordance with the present invention can be usefully used as a medicine delivery means in the field of pharmaceutics. Thus, cucurbit[7]uril-[60] fullerene complex was produced by crushing a mixture of 20.1 mg (28+10-3 mmol) [60] fullerene and 16.3 mg (14+10-3 mmol) cucurbit[7]uril (CB[7]) in a chrome steel mixing crusher using chrome steel crushing balls with the speed of 20 rpm for 1 to 10 h. After washing-out the produced CB[7]-C60 fullerene complex with warm water, 2 M NaOH was added to the solution to control its pH to be 12, followed by adding 20 mL toluene to dissolve the remaining CB[7] and non-coupled [60]fullerene. After dissolving excessive initial compds. by agitation the mixture for 30 min, the complex was allowed to precipitate The aqueous phase containing the insol. complex was frozen, so that the upper organic phase could be decanted. After leaving the aqueous-phase until it got back to room temperature, it was centrifuged at 0° with 5000 rpm for 10 min, and then water was poured out carefully. After washing the complex with pure water until its pH got to be neutral, the remained water was finally evaporated and the dark-brown complex was vacuum-dried to obtain the complex having the 1:2 weight ratio of cucurbit[7]uril to [60]fullerene (33% yield).

259386-50-5, Cucurbit[7]uril RL: PEP (Physical, engineering or chemical process); PYP (Physical

process); PROC (Process) (preparation of cucurbituril-fullerene complex as pharmaceutical carrier)

RN 259886-50-5 HCAPLUS

2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19 a, 20a, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30aoctacosaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cycloocta[1'''',2' ''',3''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'': 3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-cd:1', 2', 3'-gh]pentalene-1,4,6,8,10,12,14,16,19,21,23,25,27,29-tetradecone, tetradecahydro-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

II 742079-08-9F, Cucurbit[7]uril-fullerene complex RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of cucurbituril-fullerene complex as pharmaceutical carrier) 742079-08-9 HCAPLUS

RN 742079-08-9 HCAPLU: CN 2.18:3.17-Dimethano

2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19a,20a,21a,22a,23a,24a,52a,26a,27a,28a,29a,30a-octacosaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cycloocta[1''',2''',3'''';3''',4'']pentaleno[1''',6''':5'',6''',7'']cycloocta[1'',2'',3''';3''',4'']pentaleno[1'',6'':5,6',7)cycloocta[1'',2',3''';3'',4'']pentaleno[1,2,3-cd:1',2',3'-cd:1',2',3'-cd:1'',2'',3''';3'';4',6,8,10,12,14,16,19,21,23,25,27,29-tetradecone, tetradecahydro-, stereoisomer, comod. with [5,6]fullerene-660-Ih [9CI] (CA INDEX NAME)

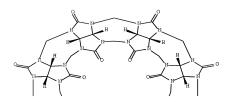
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CRN 259886-50-5 CMF C42 H42 N28 O14

Relative stereochemistry.

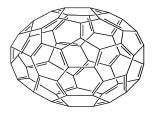
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155



CM 2

CRN 99685-96-8 CMF C60



THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

Kim, Kimoon; Balaji, Rengarajan; Oh, Dong-hyun; Ko, Yong-ho; Jon,

L45 ANSWER 18 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2004:696412 HCAPLUS Full-text

Postech Foundation, S. Korea

PCT Int. Appl., 43 pp. CODEN: PIXXD2

Silica gel bonded with cucurbiturils

OSC.G 1 RE.CNT 1

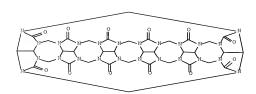
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PA

141:207238

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PRAI KR 2003-8453
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                         W
                               20040211 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     A cucurbituril-bonded silica gel and its use are provided. The cucurbituril-
     bonded silica gel useful for removal of air pollutants or water contaminants,
     and separation and purification of biol., organic, inorg., or ionic
     substances.
     80262-44-8, Cucurbituril
     RL: NUU (Other use, unclassified); USES (Uses)
       (cucurbituril bonded silica gel as sorbents and chromatog, stationary
       phases)
     80262-44-8 HCAPLUS
RN
     1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-
CN
     5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-
     2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
     a, 25a, 26a-tetracosaazabispentaleno[1''', 6''':5'', 6''', 7'']cycloocta[1'', 2''
     ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
     g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
     1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro- (CA INDEX NAME)
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558460-05-2 RL: RCT (Reactant); RACT (Reactant or reagent) (synthesis of silica gel linked with cucurbituril by amide bond) RN 558460-05-2 HCAPLUS CN ''',2''''',2''''',2''''''-[(dodecahydro-1,4,6,8,10,12,14,17,19,21,23,25dodecaoxo-1H, 4H, 14H, 17H-2, 16:3, 15-dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1''', 6''':5'', 6''', 7'']cycloocta[1'', 2'' ,3'':3',4'|pentaleno[1',6':5,6,7]cvcloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-dodecayl) dodecakis (oxy-3, 1propanedivlthio) | dodecakis-, stereoisomer (9CI) (CA INDEX NAME) \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\* 558446-01-8 RL: RCT (Reactant); RACT (Reactant or reagent) (synthesis of silica gel linked with cucurbituril by amino bond) RN 558446-01-8 HCAPLUS

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1''', 6''':5'', 6''', 7'']cycloocta[1'', 2''

dodecahydro-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-dodecakis (2-

,3'':3',4'|pentaleno[1',6':5,6,7]cvcloocta[1,2,3-qh:1',2',3'-

g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone,

hydroxyethoxy)-, stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.

1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

ΙT

CN

PAGE 1-B

158

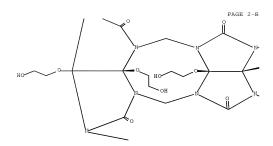


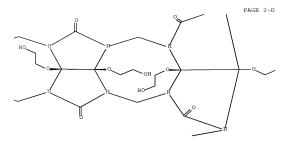
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PAGE 1-D





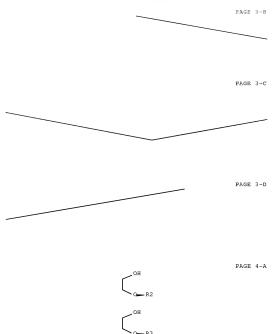


PAGE 2-E

**~**⊙H

PAGE 3-A





IT 558445-90-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis of silica gel linked with cucurbituril by sulfido-bond)

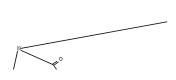
RN 558445-90-2 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1''',6''':5'',6''',7'']cycloocta[1'',2''

,3''.3',4'|pentaleno[1',6''.5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-dc.5,6,7-c'd']dipentaleno=1,4,6,8,10,12,14,17,19,21,23,25-dodecone,dodecahydro-2a,15a,17b,19b,19c,21b,21c,23b,23c,25b,25c,26b-dodecakis(2-propen-1-yloxy)-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-B

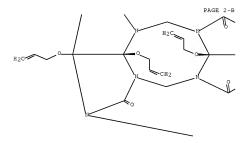


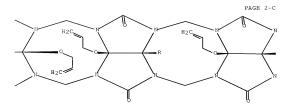
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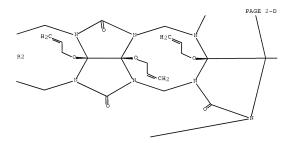


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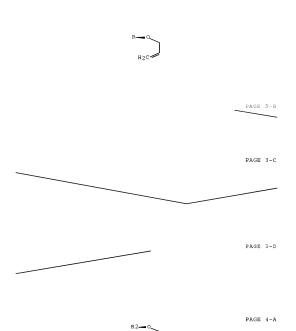




PAGE 2-E

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PAGE 3-A



OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
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ALL CITATIONS AVAILABLE IN THE RE FORMAT

H2C-

L45 ANSWER 19 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN AN 2004:534372 HCAPLUS  $\underline{\text{Full-text}}$ 

D. B. MITT

ADDITOR MEDITAL

- 141:90461 DN
- TΙ Temporary finishing of textiles with cucurbiturils
- IN Doering, Steve; Kainz, Sabine; Roesmann, Rolf
- PA Henkel Commanditgesellschaft Auf Aktien, Germany

TETATO

Α

- SO PCT Int. Appl., 37 pp. CODEN: PIXXD2
- DT Patent
- LA German
- FAN.CNT 1

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20021217 <--

WO 2003-EP13810 20031206 AΒ In the title process, especially useful with clothing, the textiles are treated with aqueous compns. containing cucurbiturils and then dried,

0.7 000

preferably at ≤80° under normal pressure. The invention also relates to the use of cucurbiturils for providing textiles with a temporary deodorizing finish or for long-term scenting of textiles.

- 80262-44-8, Cucurbituril 283175-97-3,
  - Cucurbit[6]uril

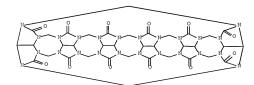
PRAI DE 2002-10258830

RL: NUU (Other use, unclassified); USES (Uses)

- (temporary finishing of textiles with cucurbiturils) 80262-44-8 HCAPLUS
- RN
- CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24 a, 25a, 26a-tetracosaazabispentaleno[1''',6''':5''',6''',7'']cycloocta[1'',2'' ,3'':3',4']pentaleno[1',6':5,6,7]cvcloocta[1,2,3-gh:1',2',3'-

- g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
- 1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro- (CA INDEX NAME)



- RN 283175-97-3 HCAPLUS
- CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a,25a,26a-tetracosaazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'' ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-

g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 1-B

PAGE 1-C

OSC.G THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS) RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 20 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2003:582450 HCAPLUS Full-text

DN 139:149628

Improved preparation of cucurbits, their use as gas scavengers, and method for removing gas by them

IN Mivahara, Yuji

PA Sangaku Renkei Kiko Kyushu K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

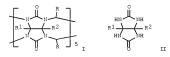
DT Patent LA Japanese

FAN

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	PATENT NO.	KIND	DATE	API	PLICATION NO.	DATE	
PI	JP 2003212877	A	20030730	JP	2002-14380	20020123 <	-
PRAI	JP 2002-14380		20020123	<			
O.C.	CACDEACT 130.140620.	MADDAY	T 120.1/06'	20			

CASREACT 139:149628; MARPAT 139:149628





AB Cucurbits I [R = H, C1-6 (un)substituted alkyl, C2-6 (un)substituted alkenyl, (un) substituted Ph; R1, R2 = H, C1-10 (un) substituted alkyl, (un) substituted Ph], useful for removing O, N, CO, CO2, CO, Ar, etc., are prepared by treatment of RCHO (R = same as above) with qlycoluril derivs. II (R1, R2 = same as above) and NH4Cl in the presence of HCl, separating the resulting NH4Cl adducts, converting them into NH4OH adducts, and heating (in vacuo) to remove NH3. Alternatively, the glycoluril derivs. are stepwise treated with the aldehydes in the presence of HC1, and with NH4C1. Thus, II (R1 = R2 = Me) was treated with NH4Cl, concentrated HCl and formalin at 80° for 6 h,

concentrated, treated with Amberlite IRA 410 (anion exchanger), and heated at 80° to give almost quant. I (R1 = R2 = Me).

IT 480434-28-4P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of cucurbits via ammonium chloride adducts for gas scavengers) RN 480434-28-4 HCAPLUS

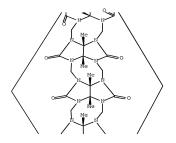
CN 1H, 4H, 12H, 15H-2, 14:3, 13-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 16H, 17H, 18H, 19H, 20H, 21H, 22H-2, 3, 44, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 13, 14, 15a, 16a, 17a, 18a, 19a, 20a, 21a, 22a-elcocaazablispentaleno[1''',6''':5'',6''',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-cd:1',2',3''-dh]pentalene-1,4,6,8,10,12,15,17],9,21-decone, decahydro-2a, 13a, 15b,16b,17b,18b,19b,20b,21b,22b-decamethyl-, dihydrochloride, diammoniate, stereoicomer (9C1) (CA INBEX NAME)

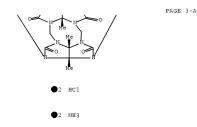
Relative stereochemistry.

PAGE 1-A





PAGE 2-A

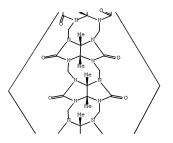


II 143902-45-8P, Decamethylcucurbit[5]uril RL: IMF (Industrial manufacture); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (preparation of cucurbits via ammonium chloride adducts for gas scavengers) RN 143902-45-8 HCAPLUS

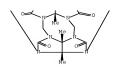
CN 1H, 4H, 12H, 15H-2, 14:3, 13-Dimethano5H, 6H, 7H, 8H, 9H, 10H, 11H, 16H, 17H, 18H, 19H, 20H, 21H, 22H2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 13, 14, 15a, 16a, 17a, 18a, 19a, 20a, 21a, 22aeicosaazabispentaleno[1''',6''',5''',6'',7'']cycloocta[1'',2'',3'':3'',4']pe
ntaleno[1',6'':5,6,7]cycloocta[1,2,3-cd:1',2',3'-gh]pentalene1,4,6,8,10,12,15,17,19,21-decone, decahydro2a, 13a, 15b, 16b, 17b, 18b, 19b, 20b, 21b, 22b-decamethyl-, stereoisomer (CA
INDEX NAME)

Relative stereochemistry.





PAGE 2-A



PAGE 3-A

## OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L45 ANSWER 21 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2003:532669 HCAPLUS Full-text

DN 139:101129

TI Methods for preparation of hydroxycucurbituril derivatives and their uses

IN Kim, Ki-Moon; Jon, Sang-Yong; Selvapalam, Narayanan; Oh, Dong-Hyun

PA Postech Foundation, S. Korea

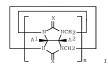
SO PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DT Patent LA English

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ΡI																20021126 <		
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			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,
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		2002																
	US	2004	-497	464		A3		2004	0602	<-	-							

US 2004-497464 A3 20040602 <-ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS CASREACT 139:101129; MARPAT 139:101129
GT



AB Provided are hydroxycucurbituril derivs., e.g., I [A1, A2 = OH, (un) substituted C1-30-alkoxy, C1-30-alkenyloxy (sic), C1-30-alkynyloxy (sic), C2-30-carbonylalkoxy, C1-30-thioalkoxy, C1-30-alkylthioloxy, C1-30hydroxyalkoxy, C1-30-alkylsilyloxy, C1-30-aminoalkoxy, C1-30aminoalkylthioalkoxy, C5-30-cycloalkoxy, C2-30-heterocycloalkoxy, C6-30arvloxy, C6-20-arvlalkoxy, C4-30-heteroarvloxy, C1-30-alkylthio, C1-30alkenvlthio (sic), C1-30-alkvnvlthio (sic), C2-30-carbonvlalkvlthio, C1-30alkylsilylthio, C1-30-aminoalkylthio, C1-30-aminoalkylthioalkylthio, C5-30cycloalkylthio, C2-30-heterocycloalkylthio, C6-30-arylthio, C6-20arylalkylthio (sic), C4-30-heteroarylthio, C4-30-heteroarylalkylthio, C1-30alkylamino, C1-30-alkenylamino (sic), C1-30-alkynylamino (sic), C2-30carbonylalkylamino, C1-30-thioalkylamino, C1-30-hydroxyalkylamino, C1-30alkylsilylamino, C1-30-aminoalkylamino, C5-30-cycloalkylamino, C2-30heterocycloalkylamino, C6-30-arylamino, C4-30-heteroarylamino; A1 = A2 = H; X = 0, S, NH; n = 4 - 20], their preparation methods and uses. Thus, hydroxycucurbit[6]uril (I; A1 = A2 = OH, X = O, n = 6) was prepared in 55% yield from cucurbit[6]uril (I; A1 = A2 = H, X = O, n = 6) via oxidation with aqueous K2S2O8. The hydroxycucurbituril derivative is easy to further functionalize with enhanced solubility in common solvents, thereby providing wider applications, e.g., in agrochems., cosmetics, medicinals and wastewater treatment. Hydroxycucurbit[6]uril formed: a 1:1 host-quest complex with THF; a 1:1 host-quest complex with isobutene; and formed an ion selective membrane with polyvinyl chloride.

IT 558446-06-3 558446-09-6 558446-11-0 558446-13-2 558446-16-5 558446-19-8

RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative) (inclusion complex; preparation of hydroxycucurbituril derivs. and their uses)

RN 558446-06-3 HCAPLUS CN 1H.4H.14H.17H-2.16:3.1

1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H2,3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
a, 25a, 26a-tetracosaazabispentaleno[1'',6'':7,'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6':5,6',7]cycloocta[1,2,3-gh;1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene1,4,6,8,10,12,14,17,19,21,23,25-dodecone,

1,4,6,8,10,12,14,17,19,21,23,25-dodecone,

dodecahydro-2a,15a,17b,19b,19c,21b,21c,23b,23c,25b,25c,26b-dodecahydroxy-, stereoisomer, compd. with cyclopentane (1:1) (9CI) (CA INDEX NAME)

CM 1

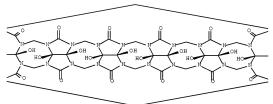
CRN 558445-69-5 CMF C36 H36 N24 O24

Relative stereochemistry.

PAGE 1-A



PAGE 1-B



PAGE 1-C

CM 2

CRN 287-92-3 CMF C5 H10



RN 558446-09-6 HCAPLUS

CN 1B, 4B, 14B, 17B-2, 16:3, 15-Dimethano-5B, 6B, 7B, 8B, 9B, 10B, 11B, 12B, 13B, 18B, 15B, 20B, 21B, 22B, 23B, 24B, 25B, 26B-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24a, 25a, 26a-tetracosaaxabispentaleno[1",6":5",6"];eycloocta[1",2",3"-3":3",4"]pentaleno[1",6":5,6,7]cycloocta[1,2,3-gh:1",2",3"g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-dodecahydroxy-, stereoisomer, compd. with 4-methylbenzenamine (1:1) (9CI) (CA INDEX NAME)

CM :

CRN 558445-69-5 CMF C36 H36 N24 O24

Relative stereochemistry.

PAGE 1-A



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CM :

CRN 106-49-0 CMF C7 H9 N

RN 558446-11-0 HCAPLUS CN 1H,4H,14H,17H-2,16:3

dodecahydro-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-dodecahydroxy-,

stereoisomer, compd. with 1,4-benzenediamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 558445-69-5

CMF C36 H36 N24 O24

Relative stereochemistry.

PAGE 1-A



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CM 2

CRN 106-50-3 CMF C6 H8 N2

RN 558446-13-2 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1''',6'':5'',6'',7'']cycloocta[1'',2'',3''-'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-

g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-

1,4,6,8,10,12,14,17,19,21,23,25-dodecone,

 $\label{eq:condition} $$ \ \ dodecahydro-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-dodecahydroxy-, stereoisomer, compd. with 2-methyl-1-propene (1:1) (9CI) (CA INDEX NAME)$ 

CM 1

CRN 558445-69-5

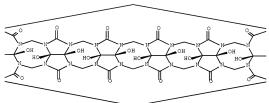
CMF C36 H36 N24 O24

Relative stereochemistry.

PAGE 1-A



PAGE 1-B



PAGE 1-C

CM 2

RN 558446-16-5 HCAPLUS

CN Ethanaminium, 2-(acetyloxy)-N,N,N-trimethyl-, chloride, compd. with stereoisomer of dodecahydro-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26bdodecahydroxy-1H, 4H, 14H, 17H-2, 16:3, 15-dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1''', 6''':5'', 6''', 7'']cycloocta[1''', 2'' ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 558445-69-5 CMF C36 H36 N24 O24

Relative stereochemistry.

PAGE 1-A



PAGE 1-C



CM 2

CRN 60-31-1

CMF C7 H16 N O2 . C1

Me3+N-CH2-CH2-OAc

€ c1 =

- RN 558446-19-8 HCAPLUS
- CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1''', 6''':5'', 6'', 7'']cycloocta[1'', 2'' ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-

g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-

1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone,

dodecahydro-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-dodecahydroxy-, stereoisomer, compd. with tetrahydrofuran (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 558445-69-5 CMF C36 H36 N24 O24

Relative stereochemistry.

PAGE 1-A

PAGE 1-C

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CM 2

CRN 109-99-9 CMF C4 H8 O



ΙT

ntaleno[1',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-gh]pentalene-1,4,6,8,10,12,15,17,19,21-decone, decahydro-, stereoisomer (CA INDEX

259886-49-2, Cucurbit[5]uril 259886-50-5, Cucurbit[7]uril 259886-51-6, Cucurbit[8]uril

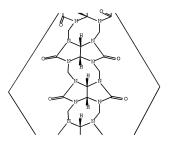
Relative stereochemistry.

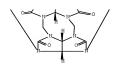
NAME)

184

PAGE 1-A







PAGE 3-A

RN 259886-50-5 HCAPLUS

Relative stereochemistry.

PAGE 1-A

RN 259886-51-6 HCAPLUS

2,2013,19-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a,
19,20,21a,22a,23a,24a,25a,26a,27a,28a,29a,30a,31a,32a,33a,34adotriacontaazabispentaleno[1'''',6''''':5''',6''',7''']cycloocta[1''',
2''',3''',4'']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene1,4,6,8,10,12,14,16,18,21,23,25,27,29,31,33-hexadecone, hexadecahydro-,
stereoicomer (CA INDEX NAME)

PAGE 1-A

RN 283175-97-3 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

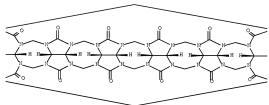
5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 13H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-23, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24a, 25a, 26a-tetracosaazabispentaleno[1'',6''';5'',6'',7'']cycloocta[1'',2'',3'',3'',4']pentaleno[1'',6''5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h

1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer (CA INDEX NAME)

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IT 558445-75-3P 558445-78-6P
RL: AWX (Analytical matrix); BSU (Biological study, unclassified); MOA
(Modifier or additive use); RCT (Reactant); REM (Removal or disposal); SPN

(Synthetic preparation); TEM (Technical or engineered material use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)

(preparation and O-alkylation of; preparation of hydroxycucurbituril derivs. and

their uses)

RN 558445-75-3 HCAPLUS

2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19 a, 20a, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a-

octacosaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cycloocta[1'''',2' ''',3''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'': 3',4'|pentaleno[1',6':5,6,7]cvcloocta[1,2,3-cd:1',2',3'-gh]pentalene-

1, 4, 6, 8, 10, 12, 14, 16, 19, 21, 23, 25, 27, 29-tetradecone,

tetradecahydro-2a, 17a, 19b, 21b, 21c, 23b, 23c, 25b, 25c, 27b, 27c, 29b, 29c, 30btetradecahydroxy-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

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558445-78-6 HCAPLUS RN

2.20:3.19-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a, CN 19, 20, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a, 31a, 32a, 33a, 34adotriacontaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cycloocta[1''''

```
,2''',3''',4''']pentaleno[1''',6''',6'',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,16,18,21,23,25,27,29,31,33-hexadecone,hexadecahydro-2a,19a,21b,23b,23c,25b,25c,27b,27c,29b,29c,31b,31c,33b,33c,34b-hexadecahydro-y, stereoisomer (CA INDEX NAME)
```

Relative stereochemistry.

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## IT 558445-90-2P

RL; AMX (Analytical matrix); BSU (Biological study, unclassified); MOA (Modifier or additive use); RCT (Reactant); REM (Removal or disposal); SPN (Synthetic preparation); TEM (Technical or engineered material use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)

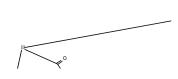
(preparation and ozonolysis or sulfuration of; preparation of hydroxycucurbituril

- derivs. and their uses)
- RN 558445-90-2 HCAPLUS
- CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-

2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24a,25a,25a-tetracosaazabispentaleno[1'',6'':5'',6'':5'',6'';7'']cycloocta[1'',2'',3'',3'',3'',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h:]cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone,dodecahydro-2a,15a,17b,19b,19c,21b,21c,23b,23c,25b,25c,26b-dodecakis(2-propen1-yloxy)-, Stereoisomer (CA INDEX NAME)

Relative stereochemistry.

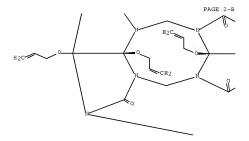
PAGE 1-B

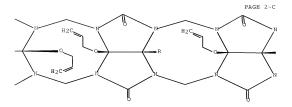


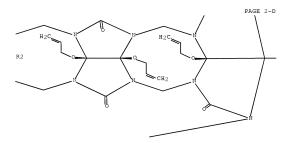
PAGE 1-C







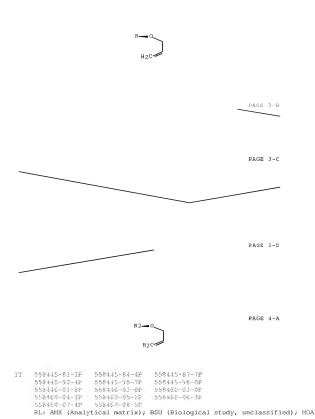




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(Modifier or additive use); REM (Removal or disposal); SPN (Synthetic preparation); TEM (Technical or engineered material use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(preparation of hydroxycucurbituril derivs. and their uses)

RN 558445-81-1 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24a, 25a, 26a-tetracosaazabispentaleno[1'',6'':5'',6'',7'']cycloocta[1,2'',3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2

1,4,6,8,10,12,14,17,19,21,23,25-dodecone,

2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-

dodecakis(acetyloxy)dodecahydro-, stereoisomer (9CI) (CA INDEX NAME)

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RN 558445-84-4 HCAPLUS

NN 350443-0-4 RCAFDOS
N 1H, 4H, 17H-2, 16:3, 15-DimethanoSH, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
a, 25a, 26a-tetracosaazabispentaleno[1''',6''':5'',6''',7'']cycloocta[1'',2''
,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-dci5,6,7-c'd']dipentalene1,4,6,8,10,12,14,17,19,21,23,25-dodecone,
dodecahydro-2a,15a,17b,19b,19c,21b,21c,23b,23c,25b,25c,26b-dodecamethoxy-,
stereoisomer (9C1) (CA INDEX NAME)

Relative stereochemistry.

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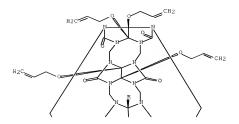
PAGE 1-C

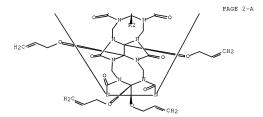
CN

RN 558445-87-7 HCAPLUS

1H, 4H, 12H, 15H-2,14:3,13-Dimethano5H, 6H, 7H, 8H, 9H, 10H, 11H, 16H, 17H, 18H, 19H, 20H, 21H, 22H2,3,4a,5a,6a,7a,8a,9a,10a,11a,13,14,15a,16a,17a,18a,19a,20a,21a,22aeicosaazabispentaleno[1''',6''',5''',6'',7'']cycloocta[1'',2'',3'':3'',4']pe
ntaleno[1',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-gh]pentalene1,4,6,8,10,12,15,17,19,21-decone, decahydro2a,13a,15b,17b,17c,19b,19c,21b,21c,22b-decakis(2-propenyloxy)-,
stereoisomer (9C1) (CA INDEX NAME)

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RN 558445-92-4 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-

2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24a,25a,26a-tetracosaazabispentaleno[1'',6'':5,6'',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone,2a,17b,19b,21b,23b,25b-hexabutoxydodecahydro-15a,19c,21c,23c,25c,26b-

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 558445-95-7 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24a, 25a, 26a-tetracosacazabispentaleno[1",2",6":5,",6",7"] cycloocta[1",2",3";3",4"]pentaleno[1",6":5,6,7]cycloocta[1,2,3-gh:1',2',3"-

g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-

hexahydroxy-, stereoisomer (9CI) (CA INDEX NAME)

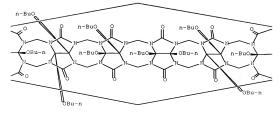
1,4,6,8,10,12,14,17,19,21,23,25-dodecone,

2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-dodecabutoxydodecahydro-, stereoisomer (9CI) (CA INDEX NAME)

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RN 558445-98-0 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
a, 25a, 26a-tetracosaazabispentaleno[1''', 6'''':5'', 6''', 7'']cycloocta[1'',2''
3'':3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-gh:1', 2', 3'g'h']cycloocta[1, 2, 3-cd:5, 6, 7-c'd']dipentalene1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone, dodecahydro-2a, 26b-dihydroxy-,
stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.

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CN

RN 558446-01-8 HCAPLUS

1H, 4H, 13H, 17H-2, 16:3, 15-Dimethano\$\$ 5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24a, 25a, 26a-tetracosaazabispentaleno[1''', 6''', 7'''] cycloocta[1'', 2''', 3'':3'', 4'] pentaleno[1', 6':5, 6', 7] cycloocta[1, 2, 3-gh:1', 2', 3'-g'h'] cycloocta[1, 2, 3-cd:5, 6, 7-c'd'] dipentalene1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone, dodecahydro-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-dodecakis(2-hydroxyethoxy)-, stereoisomer (SCI) (CA INDEX NAME)

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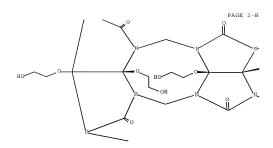


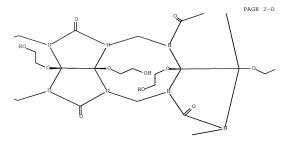
PAGE 1-C



PAGE 1-D





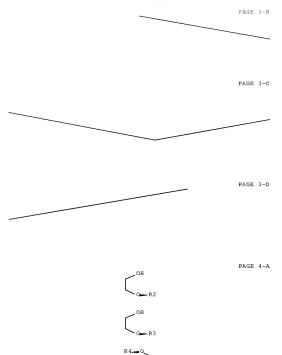


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**~**⊙H

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RN 558446-03-0 HCAPLUS

CN

1H, 4H, 14H, 17H-2,16:3,15-Dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24 a,25a,26a-eterracosaazabispentaleno[1'',6'':5'',6'',7'']cycloocta[1',2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecons dodecahydro-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26bdodecakis(propylamino)-, stereoisomer (9CI) (CA INDEX NAME)

- \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*
- 558460-03-0 HCAPLUS RN
- CN 2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19 a, 20a, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a
  - octacosaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cycloocta[1'''',2' ''',3''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'': 3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-cd:1', 2', 3'-gh]pentalene-
    - 1, 4, 6, 8, 10, 12, 14, 16, 19, 21, 23, 25, 27, 29-tetradecone,
    - tetradecahydro-2a, 17a, 19b, 21b, 21c, 23b, 23c, 25b, 25c, 27b, 27c, 29b, 29c, 30b-

tetradecakis(2-propen-1-yloxy)-, stereoisomer (CA INDEX NAME)

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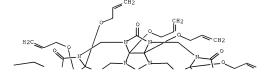
PAGE 1-B

RN 558460-04-1 HCAPLUS

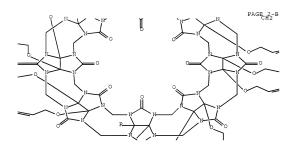
2,20:3,19-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a,19,20,21a,22a,32a,24a,25a,26a,27a,28a,29a,30a,31a,32a,33a,34a-dotriacontaarabispentaleno[1'''',6'''':5''',6''',7'''']cycloocta[1'''',2''',3'''',3''',4''']pentaleno[1'',6'':5'',6''',7'']cycloocta[1''',2'',3''';3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-qh:1',2',3'-g'h']cycloocta[1,2,3-qci.5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,16,18,21,23,25,27,29,31,33-hexadecone,hexadecahydro-2a,19a,21b,23b,23c,25b,25c,27b,27c,29b,29c,31b,31c,33b,33c,3

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$$\bigcup^{\text{CH}_2} \circ \_R$$



RN 558460-05-2 HCAPLUS CN Acetic acid, 2,2',2'

Acetic acid, 2,2',2'',2''',2'''',2'''',2'''',2''''',2''''',2''''',2''''',2''''',2''''',2''''',2''''',2''''',2'''',2'''',2'''',2'''',2'''',2'''',2'''',2'''',2'''',2''',2'''',2'''',2'''',2''',2'''',2'''',2'''',2''',2'''',2'''',2'''',2'''',2'''',2'''',2'''',2'''',2'''',2'''',2'''',2'''',2'''',2'''',2'''',2'''',2'''',2'''''

2a,15a,17b,19b,19c,21b,21c,23b,23c,25b,25c,26b-dodecayl)dodecakis(oxy-3,1-propanediylthio)]dodecakis-, stereoisomer (9CI) (CA INDEX NAME)

- \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*
- RN 558460-06-3 HCAPLUS
- CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24a, 25a, 26a-tetracosaazabispentaleno[1'', 6'':5'', 6''', 7'']cycloocta[1'', 2'', 3''';3'', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-gh:1', 2', 3'-g'h']cycloocta[1, 2, 3-cd:5, 6, 7]c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone, 2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-dodecakis[3-[(2-aminoethyl)thio]propoxyldodecahydro-, stereoisomer (CA INDEX NAME)

- \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*
- RN 558460-07-4 HCAPLUS
- CN Dodecanoic acid, dodecahydro-1,4,6,8,10,12,14,17,19,21,23,25-dodecaoxo-1H,4H,17H-2,16:3,15-dimethano-

2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-dodecayl ester, stereoisomer (9CI) (CA INDEX NAME)

- \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*
- 558460-08-5 HCAPLUS RN
- CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1''', 6''':5'', 6''', 7'']cycloocta[1''', 2'' ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-

1,4,6,8,10,12,14,17,19,21,23,25-dodecone,

dodecahydro-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26bdodecakis(phenylthio)-, stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 1-C

CN

IT 558445-69-5P 558445-72-0P

RL: AMX (Analytical matrix); BSU (Biological study, unclassified); MOA (Modifier or additive use); RCT (Reactant); REM (Removal or disposal); SPN (Synthetic preparation); TEM (Technical or engineered material use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)

(preparation, O-alkylation and guest-host complexation of; preparation of hydroxycucurbituril derivs. and their uses)

RN 558445-69-5 HCAPLUS

3043-37-37 MARIOS
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dodecahydro-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 25b, 25c, 26b-dodecahydroxy-,
stereoisomer (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

PAGE 1-C

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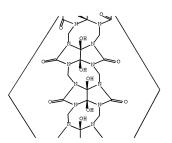
RN 558445-72-0 HCAPLUS

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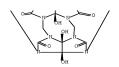
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PAGE 1-A





PAGE 2-A



PAGE 3-A

OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 22 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2003:242344 HCAPLUS Full-text

DN 138:264767

- TI Inclusion compounds comprising host cucurbituril derivatives and guest metal complexes and their pharmaceutical compositions for treatment of cancer
- IN Kim, Kimoon; Jeon, Young Jin; Kim, Soo-Young; Ko, Young Ho
- PA Postech Foundation, S. Korea

SO PCT Int. Appl., 42 pp.

CODEN: PIXXD2 DT Patent

LA English

FAN.CNT 1

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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 138:264767 GI

AB The present invention provides an inclusion compound having a variety of cucurbituril derivs. I, e.g., cucurbituril/laril, as a host mol. and metal complexes II (representing a wide variety of complexes), and especially platinum complexes, e.g., oxaliplatin, as a guest mol. A pharmaceutical composition having an anticancer effect can be obtained by using the inclusion compound according to the present invention. The pharmaceutical composition can prevent effective components from being biol. degraded in vivo and can exhibit continuous drug effect for a long time, just by a single dosage, by controlling the release time of the Pt complex once it reaches target tumor cells. The inclusion compound is used for treatment of cancer, including ovarian cancer, breast cancer, or colon cancer. Antiproliferative activities are reported of oxaliplatin-cucurbitu[7]ril 1:1 inclusion compound against A 549 (human non-small lung), SKOV-3 (human ovarian), SKMEL-2 (human melanoma), XF-498 (human CNS), and HCT-15 (human colon).

IT 502469-85-4P 502469-86-5P 502469-94-5P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of inclusion compds. comprising host cucurbituril derivs. and quest platinum complexes for treatment of cancer)

RN 502469-85-4 HCAPLUS

CN Platinum, [(1R,2R)-1,2-cyclohexanediamine-

κN, κN'][ethanedioato(2-)-κO1, κO2]-, (SP-4-2)-,

compd. with stereoisomer of hexadecahydro-2,20:3,19-dimethano-

2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 14a, 15a, 16a, 17a, 19, 20, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a, 31a, 32a, 33a, 34a-

dotriacontaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cycloocta[1'''',2'''',3'''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3

'':3',4'|pentaleno(1',6':5,6,7|cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalenehexadecone (1:2) (9CI) (CA INDEX NAME)

CM

CRN 259886-51-6

CMF C48 H48 N32 O16

Relative stereochemistry.

PAGE 1-A

CM 2

CRN 61825-94-3 CMF C8 H14 N2 O4 Pt CCI CCS

RN 502469-86-5 HCAPLUS

CN Platinum, dichloro(1, 2-ethanediamine-KN, kN')-, (SP-4-2)-,
 compd. with stereoisomer of tetradecahydro-2, 18:3, 17-dimethano 2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19a,20a,21a,22a,23a,24
 a,25a,26a,27a,28a,29a,30a octacosazabispentaleno[1'''',6''':5''',6''',7'']cycloocta[1''',2''',3''':3''',3''',1]pentaleno[1''',6''':5'',6''',7'']cycloocta[1''',2'',3'':3',4''']pentaleno[1',6':5,6',7]cycloocta[1,2,3-dcti],2,3'-dcti],2'',3'' gh]pentalenetetradecone (9CI) (CA INDEX NAME)

CM 1

CRN 259886-50-5 CMF C42 H42 N28 O14

CM 2

CRN 14096-51-6

CMF C2 H8 C12 N2 Pt

cci ccs

RN 502469-94-5 HCAPLUS

CN Platinum, dichloro(1,2-ethanediamine-KN, kN')-, (SP-4-2)-, compd. with stereoisomer of hexadecahydro-2,20:3,19-dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a,19,20,21a,22a,23a,24a,25a,26a,27a,28a,29a,30a,31a,32a,33a,34a-dotriacontaazabispentaleno[!'''',5''''':5'''',6'''',7'''']cycloocta[1''''

10 / 588846 218

,2''',3''':3'',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3''':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalenehexadecone (9CI) (CA INDEX

NAME) CM 1

CRN 259886-51-6 CMF C48 H48 N32 O16

Relative stereochemistry.

PAGE 1-A

CM 2

CRN 14096-51-6 CMF C2 H8 C12 N2 Pt

CCI CCS

10 / 588846 219

ΙT 502469-84-3P

> RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation, anticancer activity, crystal structure, binding constant, and use for treatment of cancer)

RN

502469-84-3 HCAPLUS CN Platinum, [(1R,2R)-1,2-cvclohexanediamine- $\kappa N, \kappa N'$  [ethanedioato(2-)- $\kappa O1, \kappa O2$ ]-, (SP-4-2)-, compd. with stereoisomer of tetradecahydro-2,18:3,17-dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19a,20a,21a,22a,23a,24 a, 25a, 26a, 27a, 28a, 29a, 30aoctacosaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cycloocta[1'''',2' ''',3''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'': 3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-cd:1', 2', 3'qh]pentalenetetradecone (1:1), octahydrate (9CI) (CA INDEX NAME)

CM

CRN 259886-50-5 CMF C42 H42 N28 O14

Relative stereochemistry.

PAGE 1-A

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CM 2

CRN 61825-94-3

CMF C8 H14 N2 O4 Pt

CCI CCS

OSC.G THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS) RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 23 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

2003:42277 HCAPLUS Full-text AN

DN 138:89832

- ΤI Preparation of and separation methods for cucurbituril derivs. and their use in ion sensors, as extractants, additives, drug carriers, catalysts, and chromatographic packing material, and for extraction and purification of fullerene and carboranes
- IN Kim, Kimoon; Zhao, Jianzhang; Kim, Hee-Joon; Kim, Soo-Young; Oh, Jinho
- PA Postech Foundation, S. Korea
- SO PCT Int. Appl., 45 pp.
  - CODEN: PIXXD2
- DT Patent
- LA English

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			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,	
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                            20020703 <--
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

CASREACT 138:89832; MARPAT 138:89832

Cucurbituril derivs, possessing oxo, thioxo, and imino groups, hydrogen, various alkyl or alkyl derived substituents, as well as cycloalkyl chains encompassing the bridge carbons were prepared The compds. can be used in ion sensors where the ion sensor is used to detect heavy metals such as lead, mercury, alkaline earth metals, and alkali metals. In addition, the ion sensor can be used to detect organic matter including acetylcholine, ammonium ions, organic amines, amino acid or derivs., and nucleic acid bases. These compds. can also be used to remove organic dyes from wastewater, heavy metals from water, and radioactive isotopes from radioactive wastes; they also can be used to capture and remove unpleasant odor and air pollutants, and to deodorize and decolorize livestock wastewater and ironwork wastewater. These derivs. can also be used as additives to polymers, cosmetics, artificially scented paper or textiles, pesticides, drugs, or foods. The authors also claim that these cucurbituril derivs. are useful as drug carriers, for extraction and purification of fullerene or carboranes, as packing material for chromatog. columns, as additives to gas separation membranes, and as catalysts for various chemical reactions. The cucurbituril derivs, have enhanced solubility in common solvents, thereby providing wider applications.

925361-19-7 925381-24-4 1055050-12-8 1055050-14-0 1055050-15-1 1055050-13-9

RL: PRPH (Prophetic)

(Preparation of and separation methods for cucurbituril derivs, and their use in

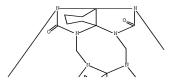
ion sensors, as extractants, additives, drug carriers, catalysts, and chromatog, packing material, and for extraction and purification of fullerene and

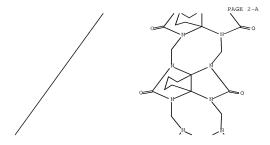
carboranes)

RN 925381-19-7 HCAPLUS

2a, 30b: 17a, 19b: 21b, 21c: 23b, 23c: 25b, 25c: 27b, 27c: 29b, 29c-Heptabutano-2,18:3,17-dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19 a, 20a, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30aoctacosaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cycloocta[1'''',2' ''',3''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1''',2'',3'': 3', 4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-qh]pentalene-1,4,6,8,10,12,14,16,19,21,23,25,27,29-tetradecone (CA INDEX NAME)

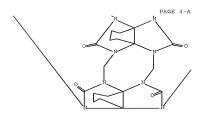
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\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -- AVAILABLE VIA OFFLINE PRINT \*

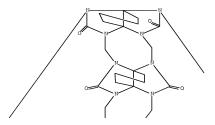


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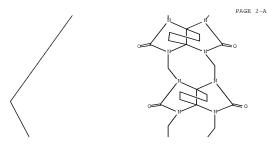
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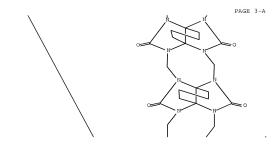
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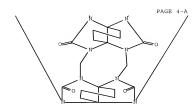




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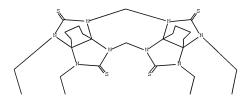




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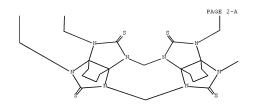
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RN 1055050-13-9 HCAPLUS CN INDEX NAME NOT YET ASSIGNED

PAGE 1-B





PAGE 2-B

RN 1055050-14-0 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 2-B

RN 1055050-15-1 HCAPLUS CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

T 406498-90-6P 406498-91-7P

RL: AGR (Agricultural use); ARG (Analytical reagent use); BUU (Biological use, unclassified); CAT (Catalyst use); COS (Cosmetic use); FFD (Food or feed use); IMF (Industrial manufacture); MOA (Modifier or additive use); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PEPE (Preparation); USES (Uses)

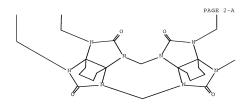
(preparation of cucurbituril derivs. and their uses in ion sensors, as extractants, additives, drug carriers, substance purifiers, and as packing material for chromatog. columns)

RN 406498-90-6 HCAPLUS CN 8H.20H.29H.36H.43H.5

8H, 20H, 29H, 36H, 43H, 50H-2, 26:30, 35:37, 42:44, 49-Tetramethano-7, 2a, 25a, 21-(methanonitrilomethanonitrilomethano)-1H, 10H, 12H, 14H, 16H, 18H, 27H, 35H, 42Hbisbenzimidazo[1",7":a:5",6"][1,3,5,7]tetrazocino[1",2":3",3",3 'a]benz imidazo[7"a,1":6,7][1,3,5,7]tetrazocino[1,2-c:2",1"-i]benzimidazo[e-1,10,14,18,27,52,53,54,56,60-decone, eicosabydro- (CA INDEX NAME)

PAGE 1-A

RN 406498-91-7 HCAPLUS



PAGE 2-B

CRN 406498-91-7 CMF C60 H72 N24 O12

ΙT

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485368-90-9P
                    485368-93-2P
                                   485368-96-5P
                   485369-06-0P
     485368-99-8P
     RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
     (Preparation)
        (preparation of cucurbituril derivs, and their uses in ion sensors, as
       extractants, additives, drug carriers, substance purifiers, and as
       packing material for chromatog, columns)
RN
     485368-80-7 HCAPLUS
     8H, 24H, 33H, 40H, 47H, 54H, 61H-2, 30:34, 39:41, 46:48, 53:55, 60-Pentamethano-
CN
     7,2a,29a,25-(methanonitrilomethanonitrilomethano)-
     1H, 10H, 12H, 14H, 16H, 18H, 20H, 22H, 31H, 39H, 46H, 53H-
     bisbenzimidazo[1''',7'''a:5'',6''][1,3,5,7]tetrazocino[1'',2'':3',3'a]benz
     imidazo[7'a,1':6,7][1,3,5,7]tetrazocino[2,1-i:2',1'-
     i'][1,3,5,7]tetrazocino[1,2-c:7,6-c']bisbenzimidazole-
     1,10,14,18,22,31,63,64,65,66,68,72-dodecone, tetracosahydro-, compd. with
     tetrahydrofuran (1:1) (9CI) (CA INDEX NAME)
    CM
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485368-80-7F 485368-84-1P 485368-87-4P

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PAGE 2-B
    CM
    CRN 109-99-9
     CMF C4 H8 O
RN
    485368-84-1 HCAPLUS
CN 8H,24H,33H,40H,47H,54H,61H-2,30:34,39:41,46:48,53:55,60-Pentamethano-
     7,2a,29a,25-(methanonitrilomethanonitrilomethano)-
     1H, 10H, 12H, 14H, 16H, 18H, 20H, 22H, 31H, 39H, 46H, 53H-
     bisbenzimidazo[1''',7'''a:5'',6''][1,3,5,7]tetrazocino[1'',2'':3',3'a]benz
     imidazo[7'a,1':6,7][1,3,5,7]tetrazocino[2,1-i:2',1'-
    i'][1,3,5,7]tetrazocino[1,2-c:7,6-c']bisbenzimidazole-
     1,10,14,18,22,31,63,64,65,66,68,72-dodecone, tetracosahydro-, compd. with
    cyclopentane (1:1) (9CI) (CA INDEX NAME)
    CM
    CRN 406498-91-7
    CMF C60 H72 N24 O12
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PAGE 2-B
    CM
    CRN 287-92-3
     CMF C5 H10
RN
    485368-87-4 HCAPLUS
CN 8H,24H,33H,40H,47H,54H,61H-2,30:34,39:41,46:48,53:55,60-Pentamethano-
     7,2a,29a,25-(methanonitrilomethanonitrilomethano)-
     1H, 10H, 12H, 14H, 16H, 18H, 20H, 22H, 31H, 39H, 46H, 53H-
     bisbenzimidazo[1''',7'''a:5'',6''][1,3,5,7]tetrazocino[1'',2'':3',3'a]benz
     imidazo[7'a,1':6,7][1,3,5,7]tetrazocino[2,1-i:2',1'-
    i'][1,3,5,7]tetrazocino[1,2-c:7,6-c']bisbenzimidazole-
     1,10,14,18,22,31,63,64,65,66,68,72-dodecone, tetracosahydro-, compd. with
     4-methylbenzenamine (1:1) (9CI) (CA INDEX NAME)
    CM
    CRN 406498-91-7
    CMF C60 H72 N24 O12
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PAGE 2-B

CM

CRN 106-49-0 CMF C7 H9 N

H<sub>2</sub>N Me

CN

RN 485368-90-9 HCAPLUS

88, 248, 33H, 40H, 47H, 54H, 61H-2, 30:34, 39:41, 46:48, 53:55, 60-Pentamethano-7, 2a, 29a, 25-(methanonitrilomethanonitrilomethano)-1H, 10H, 12H, 14H, 16H, 18H, 20H, 22H, 31H, 39H, 46H, 53H-bisbenzimidazo[1''',7''':a:5'',6''][1,3,5,7]tetrazocino[1'',2'':3',3'a]benzimidazo[7'a,1'':6,7'][1,3,5,7]tetrazocino[2,1-i:2',1'-i'][1,3,5,7]tetrazocino[1,2-c:7,6-c']bisbenzimidazole-1,10,14,1B,22,31,63,64,65,66,68,72-dodecone, tetracosahydro-, compd. with 4-methylbenzenamine hydrochloride (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 406498-91-7 CMF C60 H72 N24 O12

10 / 588846 243

PAGE 2-B

CM

CRN 106-49-0 CMF C7 H9 N

RN 485368-93-2 HCAPLUS

CN 8H, 24H, 33H, 40H, 47H, 54H, 61H-2, 30:34, 39:41, 46:48, 53:55, 60-Pentamethano-7,2a,29a,25-(methanonitrilomethanonitrilomethano)-1H, 10H, 12H, 14H, 16H, 18H, 20H, 22H, 31H, 39H, 46H, 53Hbisbenzimidazo[1''',7'''a:5'',6''][1,3,5,7]tetrazocino[1'',2'':3',3'a]benz imidazo[7'a,1':6,7][1,3,5,7]tetrazocino[2,1-i:2',1'-

i'][1,3,5,7]tetrazocino[1,2-c:7,6-c']bisbenzimidazole-

1,10,14,18,22,31,63,64,65,66,68,72-dodecone, tetracosahydro-, compd. with 1,4-benzenediamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 406498-91-7 CMF C60 H72 N24 O12

10 / 588846 245

PAGE 2-B

CM

CRN 106-50-3 CMF C6 H8 N2

CN

RN 485368-96-5 HCAPLUS

> 8H, 24H, 33H, 40H, 47H, 54H, 61H-2, 30:34, 39:41, 46:48, 53:55, 60-Pentamethano-7,2a,29a,25-(methanonitrilomethanonitrilomethano)-1H, 10H, 12H, 14H, 16H, 18H, 20H, 22H, 31H, 39H, 46H, 53Hbisbenzimidazo[1''',7'''a:5'',6''][1,3,5,7]tetrazocino[1'',2'':3',3'a]benz imidazo[7'a,1':6,7][1,3,5,7]tetrazocino[2,1-i:2',1'i'][1,3,5,7]tetrazocino[1,2-c:7,6-c']bisbenzimidazole-

1,10,14,18,22,31,63,64,65,66,68,72-dodecone, tetracosahydro-, compd. with

2-methyl-1-propene (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 406498-91-7

CMF C60 H72 N24 O12

PAGE 2-B CM 2 CRN 115-11-7 CMF C4 H8 CH2 H3C\_CH3 RN 485368-99-8 HCAPLUS CN Ethanaminium, 2-(acetyloxy)-N,N,N-trimethyl-, chloride, compd. with tetracosahydro-8H, 24H, 33H, 40H, 47H, 54H, 61H-2, 30:34, 39:41, 46:48, 53:55, 60pentamethano-7,2a,29a,25-(methanonitrilomethanonitrilomethano)-1H, 10H, 12H, 14H, 16H, 18H, 20H, 22H, 31H, 39H, 46H, 53Hbisbenzimidazo[1''',7'''a:5'',6''][1,3,5,7]tetrazocino[1'',2'':3',3'a]benz imidazo[7'a,1':6,7][1,3,5,7]tetrazocino[2,1-i:2',1'i'][1,3,5,7]tetrazocino[1,2-c:7,6-c']bisbenzimidazole-1,10,14,18,22,31,63,64,65,66,68,72-dodecone (1:1) (9CI) (CA INDEX NAME) CM CRN 406498-91-7

CMF C60 H72 N24 O12

PAGE 2-B

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CM 2

CRN 60-31-1

CMF C7 H16 N O2 . C1

Me<sub>3</sub>*N-CH<sub>2</sub>-CR<sub>2</sub>-CAc

C1-

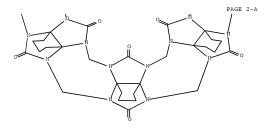
CN Borate(1-), tetraphenyl-, ammonium, compd. with eicosahydro-8H, 20H, 29H, 36H, 43H, 50H-2, 26:30, 35:37, 42:44, 49-tetramethano-7, 2a, 25a, 21-(methanonitrilomethanonitrilomethanon)-1H, 10H, 12H, 14H, 16H, 18H, 27H, 35H, 42H-bisbenzimidazo[1''', 7'''''a:5'', 6''][1, 3, 5, 7]tetrazocino[1'', 2''':3', 3'a]benz imidazo[7'a, 1'', 7][1, 3, 5, 7]tetrazocino[1, 2-c:2', 1'-i)benzimidazole-
```

1,10,14,18,27,52,53,54,56,60-decone (2:1) (9CI) (CA INDEX NAME)

CM

CRN 406498-90-6 CMF C50 H60 N20 O10 10 / 588846 250

PAGE 1-A



CM 2

CRN 14637-34-4 CMF C24 H20 B . H4 N

CCI CCS

■ NH4 +

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 24 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2002:927306 HCAPLUS Full-text

DN 138:8757

TI Production of inorganic cucurbituril composites and use as absorbents and catalyst supports

IN Richter, Andreas M.; Felicetti, Michael

PA Syntec Gesellschaft fuer Chemie und Technologie der Informationsaufzeichnung mbH. Germany

PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DT Patent LA German

LA Germa FAN.CNT 1

KIND DATE APPLICATION NO. DATE PATENT NO. \_\_\_\_\_ \_\_\_\_\_ PΙ WO 2002096553 A2 20021205 WO 2002-DE1980 20020527 <--A3 20030313 WO 2002096553 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG DE 10126394 A1 20021205 DE 2001-10126394 20010528 <--A1 20021209 AU 2002-317682 A2 20040317 EP 2002-747180 AU 2002317682 A1 20020527 <--EP 1397205 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR US 20040147396 A1 20040729 US 2003-479379 20031125 <--PRAI DE 2001-10126394 DE 2001-10126394 A 20010528 <--WO 2002-DE1980 W 20020527 <--

AB The invention relates to novel inorg. absorbent composites consisting of an open-pore, solid, inorg, matrix, comprising cucurbiturils of general formula (I) which are chemical linked in the matrix. Said cucurbiturils form a macrocycle having a cage structure, consisting of n repeating units, wherein is a whole number 5, 6, 7 or 8, R represents hydrogen or Cl-Cs alkyl, and X represents O, S or N. X and R can be the same or different. Said composites are produced by reacting cucurbituril with an inorg, matrix-forming agent, such as silica gel, at 15 to 90°C in a liquid medium. The inventive composites can be used as absorption materials and catalyst supports.

composites can be used as absorption materials and IT 283175-97-3, Cucurbit[6]uril

RL: RCT (Reactant); RACT (Reactant or reagent) (production of inorg. cucurbituril composites and use as absorbents and

catalyst supports) RN 283175-97-3 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

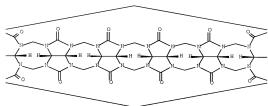
PAGE 1-A



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253

PAGE 1-B



PAGE 1-C



OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS) RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 25 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2002:426632 HCAPLUS Full-text

DN 137:21835

- ΤI Gas filter material containing cyclodextrins and/or cucurbituril loaded with olfactory materials or biocides
- IN Blum, Horst; Sick, Stefan; Salow, Hartmut; Kaussen, Manfred
- PA Papierfabrik Schoeller & Hoesch GmbH & Co. KG, Germany
- SO Eur. Pat. Appl., 11 pp. CODEN: EPXXDW
- DT Patent
- LA German FAN. CNT 1

E MIN .	OTA T	7																	
	PATENT NO.					KIND DATE				APPLICATION NO.					DATE				
							_												
PΙ	EP	1210	966			A1		2002	0605		EP 2	001-	1227	65		2	0010	921	<
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR							

DE 10059835 A1 20020613 DE 2000-10059835 20001201 <--

PRAI DE 2000-10059835 20001201 <--А

A new gas filter material from natural or synthetic fibers or combination thereof contains relative to weight by unit area of 0.01-60 weight % macrocyclic organic cage compds such as cyclodextrins and/or cucurbituril. The composition meets tech. requirements for stability and porosity and can be used loaded or not loaded for vacuum bags, vacuum exhaust gas filters and/or as gas filter material in air conditioners and climate control units. The filter material is loaded with with olfactory materials or biocides using water, without an addnl, binder. As function the filter is suitable to sep. or enrich substances. The scented substances provide pleasant additives for the airstream emitting from the filter while biocide loading can inhibit and decompose the growth of fungi and bacteria.

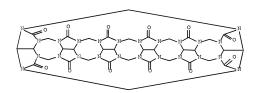
80262-44-8, Cucurbituril 283175-97-3, Cucurbit-6-uril

RL: TEM (Technical or engineered material use); USES (Uses) (gas filter material with donor and/or acceptor function)

RN 80262-44-8 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a,25a,26a-tetracosaazabispentaleno[1''',6''':5'',6''',7'']cycloocta[1'',2'' ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone, dodecahydro- (CA INDEX NAME)



RN 283175-97-3 HCAPLUS

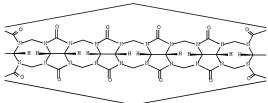
CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24 a, 25a, 26a-tetracosaazabispentaleno[1''',6''':5'',6''',7'']cycloocta[1'',2'' ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 1-B



PAGE 1-C



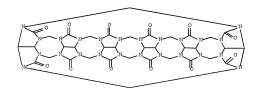
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS) RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L45 ANSWER 26 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN
- 2002:157036 HCAPLUS Full-text AN
- DN 136:200050
- TI Procedure for the production of cucurbituril from acetylenediurea
- TN Richter, Andreas M.; Felicetti, Michael
- PA Syntec Gesellschaft Fuer Chemie Und Technologie Der Informationsaufzeichnung Mbh, Germany
- SO Ger. Offen., 4 pp. CODEN: GWXXBX
- DT Patent
- LA German
- FAN.CNT 1

	PAIENI NO.	KIND	DATE	APPLICATION NO.	DAIE		
PI	DE 10040242	A1	20020228	DE 2000-10040242	20000814 <		
PRAI	DE 2000-10040242		20000814	<			
OS	CASREACT 136:200050						

- AB
- Procedure for the production of cucurbituril from acetylenediurea, by dissoln. of acetylenediurea in concentrated sulfuric acid under cooling and subsequent addition of formaldehyde, heating the solution at constant temperature within a certain period.
- 80262-44-8P, Cucurbituril
  - RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of cucurbituril from acetylenediurea)
- 80262-44-8 HCAPLUS RN
- CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-
  - 5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24 a, 25a, 26a-tetracosaazabispentaleno[1''',6''':5'',6''',7'']cvcloocta[1'',2'' ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
    - 1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro- (CA INDEX NAME)



## OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

- L45 ANSWER 27 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN
- AN 2001:388883 HCAPLUS Full-text
- DN 135:6819
- Recycling of residual dyeing bath using cucurbituril or its precursors
- Taketsuji, Koji; Ito, Ryutaro IN
- Hakuto Co., Ltd., Japan; Nagase Techno Color K. K. PA
- Jpn. Kokai Tokkyo Koho, 13 pp. SO CODEN: JKXXAF

Patent LA Japanese

FAN CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PΙ	JP 2001146690	A	20010529	JP 1999-333018	19991124 <		
PRAI	JP 1999-333018		19991124	<			

PRAI JP 1999-333018

The dyeing bath containing dyes and dyeing aids is contacted with glycoluril-HCHO condensates, separated into dye-taken condensates and water to return water to the dyeing process. The dye-taken condensates are treated with (A) ≥1 water-soluble organic solvents selected from formamide, DMF, DMSO, ethylene glycol, propylene glycol, diethylene glycol, triethylene glycol, and tetraethylene glycol and/or (B) 1/10,000-1/10 N aqueous solution of NaOH, KOH, Na2CO3, K3CO3, NaHCO3, and/or KHCO3 to release the dye from the condensates. Thus, an aqueous solution containing 500 ppm Cibacron Red 4G-E-01 (reactive dye) and 10% Na2SO4 was mixed with 2000 ppm cucurbituril precursor to give decolorized water with little change of other component compns.

80262-44-8P, Cucurbituril

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

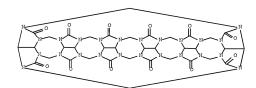
(recycling of residual dveing bath using cucurbituril or its precursors as decolorizing agents)

RN 80262-44-8 HCAPLUS

1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-CN

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24 a, 25a, 26a-tetracosaazabispentaleno[1''', 6''':5'', 6''', 7'']cycloocta[1''', 2'' ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-

1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro- (CA INDEX NAME)



## OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

- L45 ANSWER 28 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN
- AN 2001:297547 HCAPLUS Full-text
- DN 134:326547
- Cucurbituril derivatives, their preparation and uses TI
- TN Kim, Kimoon; Kim, Jaheon; Jung, In-sun; Kim, Soo-young; Lee, Eunsung;
- PA Pohang University of Science and Technology Foundation, S. Korea
- SO Eur. Pat. Appl., 26 pp.
- CODEN: EPXXDW
- Patent
- LA English

10 / 588846 258

	PATENT I	NO.			KIN	)	DATE		AP	PLIC	ATION	NO.		DATE		
PI	EP 1094	 065			A2		2001	0425	EP	200	0-305	 458		20000	0628	<
	EP 1094	065			A3		2001	1010								
	EP 1094	065			В1		2003	1217								
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	R, I	T, LI	, LU	, NL,	SE, MC	, PT	,
		IE,	SI,	LT,	LV,	FI,	, RO									
	KR 2001	03966	2		A		2001	0515	KR	200	0-330	26		20000	0615	<
	US 6365	734			В1		2002	0402	US	200	0-605	635		20000	0628	<
	JP 2001	12287	17		A		2001	0508	JP	200	0-200	196		20000	0630	<
	JP 3432	483			B2		2003	0804								
	US 2002	01330	003		A1		2002	0919	US	200	2-924	68		20020	308	<
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	US 2004	00391	.95		A1		2004	0226	US	200	3-646	722		20030	0825	<
	US 7160	466			B2		2007	0109								
PRAI	KR 1999	-4584	12		A		1999	1021	<							
	KR 2000-	-3302	26		A		2000	0615	<							
	US 2000-	-6056	35		A3		2000	0628	<							
	US 2002	-9246	8		A3		2002	0308	<							
ASSI	GNMENT H	ISTOR	Y F	OR U	S PA	ren:	r ava	ILABI	E IN	LSUS	DISP	LAY	FORMAT			
OS	CASREAC	T 134	1.32	6547	· MAI	DAT	r 134	. 3261	47							

CASREACT 134:32654/; MARPAT 134:32654/



336609-36-0

GI

AB Cucurbituril derivs. I [X = O, S, NH; R1, R2 = H, alkyl, alkenyl, alkynyl, alkylthio, acyloxy, hydroxyalkyl, alkylsilyl, alkoxy, haloalkyl, NO2, alkylamino, amino, aminoalkyl, cycloalkyl, heterocyclic, aryl, heteroaryl; x = 4-20; I, x = 6, R1 = R2 = H, X = 0; x = 5, R1 = Me, R2 = H, X = 0, excluded] were prepared The cucurbituril derivs, are easily prepared as a mixture by one of three methods, and each cucurbituril derivative can be separated from the mixture by fractional crystallization I or their mixts, are very useful in removing dyes and heavy metal ions dissolved in water or waste water. They also bind heavy metals, radioactive isotopes, CO, CO2, NOx, SOx, amines, amino acids, nucleic acid bases, alkali metals and alkaline earth metals. TT 336609-32-6 336609-33-7 336609-35-9

a, 20a, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a- octacosaazabispentaleno[1'''',6''''',5'''',6'''',7'''']cycloocta[1'''		336609-43-9 336609-44-0 336609-45-1
<pre>RN 336609-32-6 HCAPLUS Cn 2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,16 a,20a,21a,22a,23a,24a,25a,26a,27a,28a,29a,30a- octacosaazabispentaleno[1''',5'''',5''',6''',7'']cycloocta[1''',2'',3'''',3''',3''',3''',3''',5'',6'',7'',5'',6'',7'']cycloocta[1'',2'',3''',3''',3''',3''',3''',3''',3'</pre>		RL: NUU (Other use, unclassified); USES (Uses)
<pre>CN 2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,16 a,20a,21a,22a,23a,24a,25a,26a,27a,28a,29a,30a- octacosaazabispentaleno[1'''',6'''',6'''',7''']cycloocta[1''',3'''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1''',2'',5''',7'']cycloocta[1''',2'',5''',7'']cycloocta[1''',2'',5''',7'']</pre>		(cucurbituril complexation of dyes)
a,20a,21a,22a,23a,24a,25a,26a,27a,28a,29a,30a- cctacosaazabispentaleno[1'''',6'''',5'''',6'''',7''']cycloocta[1''', ''',3'''':3''',4''']pentaleno[1''',6''',5'',6'',7'']cycloocta[1'',2'',5	RN	336609-32-6 HCAPLUS
octacosaazabispentaleno[1'''',6'''':5''',6'''',7''']cycloocta[1''',6''',3'''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3	CN	2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19
''',3'''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3		a, 20a, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a-
		octacosaazabispentaleno[1''''',6''''':5'''',6'''',7'''']cycloocta[1'''',2'
3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-		''',3''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'':
		3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-

336609-37-1 336609-38-2 336609-39-3 336609-40-6 336609-42-8

gh]pentalenetetradecone, tetradecahydro-, (2aa,17aa,19ba,21ba,21ba,23ba,23c.alph a.,25ba,25ca,27ba,27ba,21ba,92ca,30ba a lpha.)-, compd. with Direct Red 5B (1:1) (9CI) (CA INDEX NAME) CM 1

CRN 259886-50-5 CMF C42 H42 N28 014

Relative stereochemistry.

PAGE 1-A

CM 2

CRN 134092-10-7

CMF Unspecified

CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 336609-33-7 HCAPLUS

 $\texttt{CN} \qquad 2, 18: \\ 3, 17 - \texttt{Dimethano} - 2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 14a, 15a, 17, 18, 19$ 

```
a, 20a, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a-
     octacosaazabispentaleno[1'''',6'''':5'''',6''''']cycloocta[1'''',2'
     ''',3'''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'':
     3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-cd:1', 2', 3'-
     gh]pentalenetetradecone, tetradecahydro-,
     (2a\alpha, 17a\alpha, 19b\alpha, 21b\alpha, 21c\alpha, 23b\alpha, 23c.alph)
     a., 25b\alpha, 25c\alpha, 27b\alpha, 27c\alpha, 29b\alpha, 29c\alpha, 30b.a
     lpha.)-, compd. with Reactive Blue HE-G (1:1) (9CI) (CA INDEX NAME)
     CM
         1
     CRN 336183-70-1
     CMF Unspecified
     CCI MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
         2
     CM
     CRN 259886-50-5
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PAGE 1-A

CMF C42 H42 N28 O14
Relative stereochemistry.

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RN
     336609-35-9 HCAPLUS
CN
    2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19
     a, 20a, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a-
     octacosazabispentaleno[1'''',6'''':5''',6''',7'']cycloocta[1''',2'''',3'''':3'''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'':
     3', 4' | pentaleno [1', 6': 5, 6, 7] cvcloocta [1, 2, 3-cd: 1', 2', 3'-
     gh]pentalenetetradecone, tetradecahydro-,
     (2aα, 17aα, 19bα, 21bα, 21cα, 23bα, 23c, alph
     a., 25ba, 25ca, 27ba, 27ca, 29ba, 29ca, 30b.a
     lpha.)-, compd. with Reactive Navy Blue HE-R (1:1) (9CI) (CA INDEX NAME)
     CM 1
     CRN 336184-03-3
     CMF Unspecified
     CCI MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     CM 2
     CRN 259886-50-5
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CMF C42 H42 N28 O14

RN 336609-36-0 HCAPLUS CN 2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19 a, 20a, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30aoctacosaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cycloocta[1'''',2' ''',3''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'': 3', 4'|pentaleno[1', 6':5, 6, 7]cvcloocta[1, 2, 3-cd:1', 2', 3'gh]pentalenetetradecone, tetradecahydro-, (2aα, 17aα, 19bα, 21bα, 21cα, 23bα, 23c, alph a., 25ba, 25ca, 27ba, 27ca, 29ba, 29ca, 30b.a lpha.)-, compd. with Disperse Yellow E 3 (1:1) (9CI) (CA INDEX NAME) CM 1 CRN 336185-14-9 CMF Unspecified CCI MAN \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\* CM 2

CRN 259886-50-5 CMF C42 H42 N28 O14 Relative stereochemistry.

RN 336609-37-1 HCAPLUS

CN 2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19 a,20a,21a,22a,23a,24a,25a,26a,27a,28a,29a,30a-octacosaazabispentaleno[1'''',6'''':5''',6''',7'']cycloocta[1''',2''',3'''',3'''',9'']cycloocta[1'',2'',3''';3'',4''']pentaleno[1''',6''':5'',6''',7'']cycloocta[1'',2'',3''';gh]pentalenetetradecone, tetradecahydro-,(2aa,17aa,19ba,21ba,21ca,23ba,23c.alph a.,25ba,25ca,27ba,27ca,29ba,29ca,30b.alpha.)-, compd. with 4,11-diamino-2-(3-methoxypropyl)-1H-naphth[2,3-f]isoindole-1,3,5,10(2H)-tetrone (1:1) (9CI) (CA INDEX NAME)

CRN 259886-50-5 CMF C42 H42 N28 O14

Relative stereochemistry.

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CM 2 CRN 12217-80-0

CMF C20 H17 N3 O5

336609-38-2 HCAPLUS RN

2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19 a, 20a, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30aoctacosaazabispentaleno[1'''',6'''':5'''',6''''',7'''']cycloocta[1'''',2' ''',3''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'': 3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-cd:1', 2', 3'gh]pentalenetetradecone, tetradecahydro-,  $(2a\alpha, 17a\alpha, 19b\alpha, 21b\alpha, 21c\alpha, 23b\alpha, 23c.alph$ 

a., 25ba, 25ca, 27ba, 27ca, 29ba, 29ca, 30b.a

lpha.)-, compd. with C.I. Direct Orange 34 (1:1) (9CI) (CA INDEX NAME)

CM

CN

CRN 259886-50-5

CMF C42 H42 N28 O14 Relative stereochemistry.

PAGE 1-A

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CM
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CRN 12222-37-6

CMF Unspecified

CCI MAN

CN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 336609-39-3 HCAPLUS

2,20:3,19-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a,19,20,21a,22a,23a,24a,25a,26a,27a,28a,23a,30a,31a,32a,33a,34a-dotriacontaazabispentaleno[1''',6''':5''',6''',7'']cycloocta[1''',2''',3''',3''',3'',4'']pentaleno[1'',6'':5'',6''',7'']cycloocta[1'',2'',3''',3'',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-g'h']cycloocta[1,2,3-qai',1',2',3'-q'h']cycloocta[1,2,3-qai',1',2',3-q'h']cycloocta[1,2,3-qai',1',2',3-q'h']cycloocta[1,2,3-qai',1',2',3-q'h']cycloocta[1,2,3-qai',1',2',3-q'h']cycloocta[1,2,3-qai',1',2',3-q'h']cycloocta[1,2,3-qai',1',2',3-q'h']cycloocta[1,2,3-qai',1',2',3-q'h']cycloocta[1,2,3-qai',1',2',3-q'h']cycloocta[1,2,3-qai',1',2',3-q'h']cycloocta[1,2,3-qai',1',2',3-q'h']cycloocta[1,2,3-qai',1',2',3-q'h']cycloocta[1,2,3-qai',1',2',3-qai',1',2',3-qai',1',2',3-qai',1',2',3-qai',1',2',3-qai',1',2',3-qai',1',2'

CM

CRN 259886-51-6 CMF C48 H48 N32 O16

Relative stereochemistry.

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CM 2

CRN 134092-10-7

CMF Unspecified

CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 336609-40-6 HCAPLUS

a.,27b $\alpha$ ,27c $\alpha$ ,29b $\alpha$ ,29c $\alpha$ ,31b $\alpha$ ,31c $\alpha$ ,33b.a lpha.,33c $\alpha$ ,34b $\alpha$ )-, compd. with Reactive Blue HE-G (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 336183-70-1 CMF Unspecified

CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 259886-51-6

CMF C48 H48 N32 O16

Relative stereochemistry.

RN 336609-42-8 HCAPLUS

CN 2,20:3,19-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a,

```
19,20,21a,22a,23a,24a,25a,26a,27a,28a,29a,30a,31a,32a,33a,34a-
dotriacontaazabispentaleno[1:''',6'''',5'''',7'''|cycloocta[1''',2''',3''',3''',4''']pentaleno[1'',6'':5',6'',7'''|cycloocta[1'',2'',3''',3'',4'']pentaleno[1'',6':5,6,7]cycloocta[1,2,3-qh:1',2',3'-
g'h']cycloocta[1,2,3-qd:5,6,7-c'd']dipentalenehexadecone, hexadecahydro-,
(2au,19au,21bu,23bu,23bu,25bu,25bu,3b,3b,a]
a,27bu,27cu,29bu,29cu,31bu,31cu,33b.a
lpha,33cu,34bu,-compd. with Reactive Navy Blue HE-R (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 336184-03-3
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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CM

CRN 259886-51-6 CMF C48 H48 N32 O16

Relative stereochemistry.

RN 336609-43-9 HCAPLUS
CN 2,20:3,19-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a,
19,20,21a,22a,23a,24a,25a,26a,27a,28a,29a,30a,31a,32a,33a,34adotriacontaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cycloocta[1'''',2''',3'''',3''',4''']pentaleno[1'',6''':5'',6'',7'']cycloocta[1''',2'',3''']
g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalenehaxadecone, hexadecahydro-,
(2aa,19aa,2]ba,23ba,23ca,25ba,25ca,31ba,31ca,33b.a
lpha.,32ca,33ba)-, compd. with Disperse Yellow E 3 (1:1) (9CI)
(CA INDEX NAME)

CM 1

CRN 336185-14-9

CMF Unspecified

CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 259886-51-6

CMF C48 H48 N32 O16

Relative stereochemistry.

PAGE 1-A

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336609-44-0 HCAPLUS
RN
CN
      2,20:3,19-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a,
      19, 20, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a, 31a, 32a, 33a, 34a-
     dotriacontaazabispentaleno[1'''',6'''':5''',6'''',7'''']cycloocta[1'''',2'''',3'''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3''']
      '':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
      g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalenehexadecone, hexadecahydro-,
      (2a\alpha, 19a\alpha, 21b\alpha, 23b\alpha, 23c\alpha, 25b\alpha, 25c.alph
      a., 27bα, 27cα, 29bα, 29cα, 31bα, 31cα, 33b.a
      lpha., 33c\alpha, 34b\alpha) -, compd. with
      4,11-diamino-2-(3-methoxypropyl)-1H-naphth[2,3-f]isoindole-1,3,5,10(2H)-
      tetrone (1:1) (9CI) (CA INDEX NAME)
     CM 1
     CRN 259886-51-6
      CMF C48 H48 N32 O16
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Relative stereochemistry.

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CM :

CRN 12217-80-0 CMF C20 H17 N3 O5

RN 336609-45-1 HCAPLUS

CN 2,20:3,19-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a,
19,20,21a,22a,23a,24a,25a,26a,27a,28a,29a,30a,31a,32a,33a,34adotriacontaazabispentaleno[1''',6''':5''',6''',7'']cycloocta[1''',2''',3'''':3''',4''']pentaleno[1''',6''':5''',6'',7'']cycloocta[1'',2'',3

'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalenehexadecone, hexadecahydro-, (2aα,19aα,21bα,23bα,23cα,25bα,25c.alph a,27bα,27cα,29bα,29cα,31bα,31cα,33b.a lpha.,33cα,34bα)-, compd. with C.I. Direct Orange 34 (1:1) (9CI) (CA INDEX NAME)

CRN 259886-51-6 CMF C48 H48 N32 O16

Relative stereochemistry.

PAGE 1-A

CM 2

CRN 12222-37-6 CMF Unspecified CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 259886-50-8P, Cucurbit[7]uril 259886-51-6P,
Cucurbit[8]uril RL: NUU (Other use, unclassified); PRP (Properties); RCT (Reactant); SPN
(Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent);
USES (Uses)

(preparation of cucurbiturils as chelating agents)

RN 259886-50-5 HCAPLUS

CN 2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19
a,20a,21a,22a,23a,24a,25a,25a,27a,28a,29a,30aoctacosaazabispentaleno[1'''',6'''':5'''',6'''',7''']cycloocta[1''',2''
''',3'''',3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'':
3',4'']pentaleno[1',6':5,6',7]cycloocta[1],2,3-cd:1',2',3'-gh]pentaleno[1',6':5,6'',7]cycloocta[1],2,3-cd:1',2',3'-gh]pentaleno[1',6':5,6'',7]cycloocta[1],2,3-cd:1',2',3'-gh]pentaleno[1',6':5,6'',7]cycloocta[1],2,3-cd:1',2',3'-gh]pentaleno[1',6'',6'',7]cycloocta[1],2,3-cd:1',2',3'-gh]pentaleno[1',6'',6'',7]cycloocta[1],2,3-cd:1',2',3'-gh]pentaleno[1',6'',6'',7]cycloocta[1',2',3''-gh]pentaleno[1',2'',3''-gh]pentaleno[1',6'',6'',7]cycloocta[1',2',3''-gh]pentaleno[1',2'',3''-gh]pentaleno[1',6'',6'',7]cycloocta[1',2',3''-gh]pentaleno[1',6'',6'',7]cycloocta[1',2',3''-gh]pentaleno[1',6'',6'',7]cycloocta[1',2',3''-gh]pentaleno[1',6'',6'',7]cycloocta[1',2',3''-gh]pentaleno[1',6'',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',7]cycloocta[1,2',3''-gh]pentaleno[1',6'',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',7]cycloocta[1',

Relative stereochemistry.

PAGE 1-A

RN 259886-51-6 HCAPLUS

```
,2''',3''',4''']pentaleno[1'',6'':5'',6'',7'']cycloocta[1'',2'',3'']
'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-d:5,6,7-c'd']dipentalene
1,4,6,8,10,12,14,16,18,21,23,25,27,29,31,33-hexadecone, hexadecahydro-,stereoisomer (CA INDEX NAME)
```

Relative stereochemistry.

PAGE 1-A

259886-49-2P, Cucurbit[5]uril

335446-43-0P

335446-40-7P

IT

5H,6H,7H,8H,9H,10H,11H,16H,17H,18H,19H,20H,21H,22H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,13,14,15a,16a,17a,18a,19a,20a,21a,22a-eicosaazabispentaleno[1'',6''':5'',6''',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1'',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-gh]pentalene-1,4,6,8,10,12,15,17,19,21-decone, decahydro-, stereoisomer (CA INDEX NAME)

335446-38-3P

335446-45-2P

Relative stereochemistry.

PAGE 1-A

PAGE 2-A

RN 335446-38-3 HCAPLUS

CN L-Tyrosine, compd. with 1,1'-dimethyl-4,4'-bipyridinium dichloride and (2aa,19aa,21ba,23ba,23ca,25ba,25c.alph a.,27ba,27ba,29ba,29ca,31ba,31ca,33b.a lpha.,33ca,34ba)-hexadecahydro-2,20:3,19-dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a,19,20,21a,22a,23a,24a,25a,26a,27a,28a,29a,30a,31a,32a,33a,34a-dotriacontaazabispentaleno[1'''',6''':5'',6'',7'']cycloocta[1'',2''',3'''',3''',4'']pentaleno[1'',6'':5'',6'',7'']cycloocta[1'',2'',3'',4'']pentaleno[1',6':5,6,7]cycloocta[1,2,3-di]t',2',3'-g'h']cycloocta[1,2,3-di,5,6,7-c'd']dipentalenehexadecone (1:1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 259886-51-6 CMF C48 H48 N32 O16

Relative stereochemistry.

CM

CRN 1910-42-5

CMF C12 H14 N2 . 2 C1

●2 C1-

CM 3

CRN 60-18-4 CMF C9 H11 N O3

Absolute stereochemistry. Rotation (-).

RN 335446-40-7 HCAPLUS

CN

L-Trytophan, compd. with 1,1'-dimethyl-4,4'-bipyridinium dichloride and (2aq,19aq,21bq,23bq,23cq,25bq,25c,alph

a., 27bα, 27cα, 29bα, 29cα, 31bα, 31cα, 33b.a

lpha., 33ca, 34ba)-hexadecahydro-2, 20:3, 19-dimethano-

2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 14a, 15a, 16a, 17a, 19, 20, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a, 31a, 32a, 33a, 34a-

g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalenehexadecone (1:1:1) (9CI)

(CA INDEX NAME)

CM 1

CRN 259886-51-6 CMF C48 H48 N32 O16

Relative stereochemistry.

PAGE 1-A

CM 2

CRN 1910-42-5 CMF C12 H14 N2 . 2 C1

●2 c1-

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CM 3

CRN 73-22-3 CMF C11 H12 N2 O2

Absolute stereochemistry.

335446-43-0 HCAPLUS RN

4,4'-Bipyridinium, dichloride, compd. with

 $(2a\alpha, 19a\alpha, 21b\alpha, 23b\alpha, 23c\alpha, 25b\alpha, 25c.alph$ 

a., 27bα, 27cα, 29bα, 29cα, 31bα, 31cα, 33b.a

lpha., 33ca, 34ba)-hexadecahydro-2, 20:3, 19-dimethano-

2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 14a, 15a, 16a, 17a, 19, 20, 21a, 22a, 23a, 24 a, 25a, 26a, 27a, 28a, 29a, 30a, 31a, 32a, 33a, 34a-

dotriacontaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cvcloocta[1''''

,2''',3''':3''',4''']pentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3 '':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-

g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalenehexadecone and

5-methyl-2,4(1H,3H)-pyrimidinedione (1:1:1) (9CI) (CA INDEX NAME)

CM 1

CN

CRN 259886-51-6

CMF C48 H48 N32 O16

Relative stereochemistry.

CM 2

CRN 1910-42-5 CMF C12 H14 N2 . 2 C1

2 c1-

CM

CRN 65-71-4 CMF C5 H6 N2 O2

CN

RN 335446-45-2 HCAPLUS

4,4'-Bipyridinium, 1,1'-dimethyl-, dichloride, compd. with

(2aα, 19aα, 21bα, 23bα, 23cα, 25bα, 25c.alph

a., 27ba, 27ca, 29ba, 29ca, 31ba, 31ca, 33b, a

lpha., 33cα, 34bα) -hexadecahydro-2, 20:3, 19-dimethano-

2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 14a, 15a, 16a, 17a, 19, 20, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a, 31a, 32a, 33a, 34a-

dotriacontaazabispentaleno[1'''',6'''':5'''',6'''',7'''']cycloocta[1''''

7.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |

g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalenehexadecone (1:1) (9CI) (CA

INDEX NAME)

CM 1

CRN 259886-51-6

CMF C48 H48 N32 O16

Relative stereochemistry.

PAGE 1-A

CM 2

CRN 1910-42-5

CMF C12 H14 N2 . 2 C1

■2 C1 =

RN 335672-73-6 HCAPLUS

No. 1 No. 2 No. 2

CM 1

CRN 259886-51-6 CMF C48 H48 N32 O16

Relative stereochemistry.

CM 2

CRN 14096-51-6

CMF C2 H8 C12 N2 Pt

CCI CCS

II 259886-56-1F 259886-57-2F 283175-97-3F, Cucurbit[6]uril 335446-31-6P 335446-33-8P 335446-35-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of cucurbiturils as chelating agents)

RN 259886-56-1 HCAPLUS

CN 2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19 a,20a,21a,22a,23a,24a,25a,26a,27a,28a,29a,30a-

octacosaazabispentaleno[1'''',6'''':5''',6'''',7''']cycloocta[1''',2''',3''':3'''',4''']pentaleno[1''',6'':5'',6''',7'']cycloocta[1''',2'',3'':3',4'']pentaleno[1',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-

gh]pentalenetetradecone, tetradecahydro-,

 $(2a\alpha, 17a\alpha, 19b\alpha, 21b\alpha, 21c\alpha, 23b\alpha, 23c.alpha, 25b\alpha, 25c\alpha, 27b\alpha, 27c\alpha, 29b\alpha, 29c\alpha, 30b.a$ 

lpha.)-, compd. with 2,2'-(2,6-naphthalenediy1)bis[4,5-dihydro-1H-imidazole] (1:1), dihydrochloride (9CI) (CA INDEX NAME)

CM 1

CRN 259886-58-3

CMF C16 H16 N4

CM 2

CRN 259886-50-5 CMF C42 H42 N28 O14

Relative stereochemistry.

PAGE 1-A

RN 259886-57-2 HCAPLUS

RN 2988-5/1-2 HCAPLUS

RN 2,2013,19-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a,
19,20,21a,22a,23a,24a,25a,26a,27a,28a,29a,30a,31a,32a,33a,34adotriacontaazabispentaleno[1''',6'''':5''',6''',7''']cycloocta[1''',2''',3'''',3'''',1'']pertaleno[1''',6''',5''',6''',7''']cycloocta[1''',2'',3''']
g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalenehxadecone, hexadecahydro-,
(2aa,19aa,21ba,23ba,25ba,25c.alph
a.,27ba,27ca,29ba,29ca,31ba,31ca,33ba
lpha.,33ca,34ba)-, compd. with
2,2'-(2,6-naphthalenediyl)bis[4,5-dihydro-1H-imidazole] (1:2),
tetrahydrochloride (9C1) (CA INDEX NAME)

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CM 1

CRN 259886-58-3

CMF C16 H16 N4

CM 2

CRN 259886-51-6 CMF C48 H48 N32 O16

Relative stereochemistry.

- RN 283175-97-3 HCAPLUS
- CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2,3 (4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a, 25a, 26a-tetracosaazabispentaleno[1'',6'':5'',6'',7'']cycloocta[1'',2'' ,3'''3',4']pentaleno[1',6''5,6,7]cycloocta[1,2,3-gh:1',2',3'-

g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-

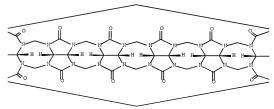
1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 1-B



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PAGE 1-C

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> N

RN 335446-31-6 HCAPLUS

CN 2,20:3,19-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,16a,17a, 19,20,21a,22a,23a,24a,25a,26a,27a,28a,29a,30a,31a,32a,33a,34a,dotriacontaazabispentaleno[1'''',6''''':5'''',6'''','''']cycloocta[1'''',2''',3'''',3'''',4'']pentaleno[1'''',6''',5''',6''',7''']cycloocta[1'',2'',3''']cycloocta[1',2,3-cd:5,6,7-c'd']dipentalenehexadecone, hexadecahydro-,(2aa,19aa,21ba,25ba,25c.a1ba,31ca,33ba,3aca,27ca,29ba,29ca,31ba,31ca,33b.a]pha.,33ca,34ba)-, compd. with 1,4,7,10-tetraazacyclododecane tetrahydrochloride (1:1) [9C1) (CA INDEX NAME)

CM 1

CRN 259886-51-6 CMF C48 H48 N32 O16

Relative stereochemistry.

CM 2

CRN 294-90-6 CMF C8 H20 N4

RN 335446-33-8 HCAPLUS

CN 2, 20:3, 19-Dimethano-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 14a, 15a, 16a, 17a, 19, 20, 21a, 22a, 23a, 24a, 25a, 26a, 27a, 28a, 29a, 30a, 31a, 32a, 33a, 34a-dotriacontaazabispentaleno[1'''', 6''''', 5'''', 6''', 7''']cycloocta[1''', 2''', 3'''', 4']pentaleno[1'', 6''', 5'', 6''', 7'']cycloocta[1'', 2'', 3''']cycloocta[1, 2, 3-cd:5, 6, 7-c'd']dipentalenehexadecone, hexadecahydro-, (2aa, 19aa, 21ba, 23ba, 23ca, 25ba, 25c. alph a., 27ba, 27ca, 29ba, 29ca, 31ba, 31ca, 33b.a lpha., 33ca, 34ba)-, compd. with 1, 4, 8, 11-tetraazacyclotetradecane tetrahydrochloride (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 259886-51-6

CMF C48 H48 N32 O16

Relative stereochemistry.

PAGE 1-A

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CM

CRN 295-37-4 CMF C10 H24 N4

- RN 335446-35-0 HCAPLUS
- CN 2,18:3,17-Dimethano-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,14a,15a,17,18,19 a,20a,21a,22a,23a,24a,25a,26a,27a,28a,29a,30aoctacosaazabispentaleno[1'''',6'''',6'''',7''']cycloocta[1'''',2''

```
...,3'...:3'...,4'...]pentaleno[1'',6'',7''.]cycloocta[1'',2'',3'': 3',4']pentaleno[1'',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-gh]pentalenetetradecone, tetradecahydro-, (2aq,17aq,19bq,21bq,21cq,23bq,23c,a1ph,a.,25bq,25cq,27bq,27cq,29bq,29cq,30b,a]pha.)-, compd. with tricyclo[3.3.1.13,7]decan-1-amine hydrochloride (1:1) (9CI) (CA INDEX NAME)

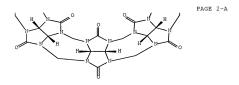
CM 1

CRN 259886-50-5

CMF C42 H42 N28 014
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Relative stereochemistry.

PAGE 1-A



CM 2 CRN 768-94-5 CMF C10 H17 N



OSC G 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS) RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

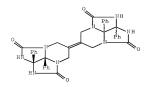
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- DN 133:122609
- TI A method for separating methane from natural gas using bisglycoluril derivatives
- IN Chang, Clarence D.; Schramm, Suzanne Elaine; Chase, Clarence Edward
- PA Mobil Oil Corporation, USA
- SO PCT Int. Appl., 21 pp. CODEN: PIXXD2
- DT Patent
- LA English

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			JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,
			MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,
			TM,	TR,	TT,	UA,	UG,	UZ,	VN,	YU,	ZA,	ZW						
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,
			DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	BJ,	CF,
			CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
	US	6106	594			A		2000	0822		US 1	999-	2355	27		1	9990	122 <
	CA	2359	661			A1		2000	0727		CA 2	000-	2359	661		2	0000	121 <
	US	6290	755			B1		2001	0918		US 2	000-	5636	93		2	0000	503 <
PRAI	US	1999	-235	527		A		1999	0122	<-	-							
	WO	2000	-US1	463		W		2000	0121	<-	-							

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

- OS MARPAT 133:122609
- AB The present invention provides a method for selectively recovering methane from a gas stream containing carbon dioxide using a bisglycoluril derivative to selectively extract the methane.
- 286012-65-5P
  - RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
  - (selective extraction of methane from natural gas using bisglycoluril derivs.)
- 286012-65-5 HCAPLUS RN
- 5H-2, 3, 4a, 7a-Tetraazacyclopent [cd]indene-1, 4(2H, 3H)-dione, 6-[hexahydro-1, 4-dioxo-5H-2a, 7b-diphenyl-2, 3, 4a, 7a
  - tetraazacyclopent[cd]inden-6(7H)-ylidene]-2a,6,7,7b-tetrahydro-2a,7bdiphenyl-, stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.

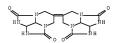


IT 286012-64-4D, derivs.

RL: TEM (Technical or engineered material use); USES (Uses) (selective extraction of methane from natural gas using bisglycoluril derivs.)

RN 286012-64-4 HCAPLUS

CN 5H-2,3,4a,7a-Tetraazacyclopent[cd]indene-1,4(2H,3H)-dione, 6-(hexahydro-1,4-dioxo-5H-2,3,4a,7a-tetraazacyclopent[cd]inden-6(7H)ylidene)tetrahydro-(9C1) (CA INDEX NAME)



## RE.CNI 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 30 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 2000:120576 HCAPLUS Full-text

DN 132:155920

TI Deodorant for treating odorous air containing formaldehyde

IN Usami, Takashi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

LA Japanese

FAN.CNT 1

GT

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000051337	A	20000222	JP 1998-230646	19980817 <
PRAI	JP 1998-230646		19980817	<	
OS	MARPAT 132:155920				

AB The title deodorant comprises 21 HCHO-scavenger compds. selected from (i) active methylene compds., cyclic ureas or non-cyclic ureas of formula: RIXHR2 (Rl and R2 = H, alkyl, substituted alkyl, aryl, substituted aryl, acyl, alkoxycarbonyl, carbamoyl or aminc; X = -CH- or -N- group), (ii) benzene derivs. of formula: (I) (R3 = alkyl, aryl, and substituted alkyl or aryl; n = an integer of ≥2), and (iii) glycoluril compds. of formula (II) (R4-6 = H, alkyl, alkenyl, aralkyl or aryl; R7 and R8 = H or alkyl). The KCHO-scavenger compds. are preferably loaded at 0.1-50 g/cm2 on the surface of a nonwoven fiber sheet support.

IT 87642-00-0 87642-01-1 257870-65-8

257870-66-9 257870-67-0

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(formaldehyde scavenger compound as; in deodorant for treating odorous air containing formaldehyde)

RN 87642-00-0 HCAPLUS

CN Imidazo[4,5-d]imidazole-2,5(1H,3H)-dione,

1,1'-(1,2-ethanediy1)bis[tetrahydro- (CA INDEX NAME)

RN 87642-01-1 HCAPLUS

CN Imidazo[4,5-d]imidazole-2,5(1H,3H)-dione,
1,1'-(1,3-propanediyl)bis[tetrahydro- (CA INDEX NAME)

RN 257870-65-8 HCAPLUS

CN Imidazo[4,5-d]imidazole-2,5(1H,3H)-dione, 1,1'-methylenebis[tetrahydro-(9CI) (CA INDEX NAME)

RN 257870-66-9 HCAPLUS

CN Imidazo[4,5-d]imidazole-2,5(1H,3H)-dione,
1,1'-(1-methyl-1,2-ethanediyl)bis[tetrahydro- (9CI) (CA INDEX NAME)

RN 257870-67-0 HCAPLUS

CN Imidazo[4,5-d]imidazole-2,5(1H,3H)-dione,
1,1'-(1,4-butanedivl)bis[tetrahydro-(9CI) (CA INDEX NAME)

L45 ANSWER 31 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 1997:623631 HCAPLUS Full-text

DN 127:205599

OREF 127:39974h,39975a

TI Preparation of cucurbituril.

- IN Buschmann, Hans-Juergen; Fink, Harald; Schollmeyer, Eckhard
- PA Deutsches Textilforschungszentrum Nord-West E.V., Germany

SO Ger. Offen., 4 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19603377	A1	19970807	DE 1996-19603377	19960131 <
	DE 19603377	B4	20061214		
PRAI	DE 1996-19603377		19960131	<	

OS CASREACT 127:205599

AB Cucurbituril (I) was prepared by (I) dissolm, of acetylenediurea (II) in aqueous mineral acid in the presence of excess formaldehyde under heating, (2) removal of H2O via distillation, and (3) heating the resulting polymer to give crystalline I. Thus, II was added to aqueous H2SO4 containing aqueous formaldehyde under heating and stirring; H2O was removed by distillation to give a residue which was heated to 135-145°. Heating was discontinued when formaldehyde cleavage began, and self-heating brought the reaction temperature to 165°. The mixture was stirred a further 15 min. and the resulting crystals were cooled and added to H2O to give 82.48 I.

IT 80262-44-8P, Cucurbituril

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

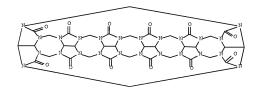
(preparation of cucurbituril)

RN 80262-44-8 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-23, 34a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24a, 25a, 26a-tetracosaazabispentaleno[1'',6''':5'',6'',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6'':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:1',3'-g'h']cycloocta[1,2,3-gh:

1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro- (CA INDEX NAME)



## OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

L45 ANSWER 32 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 1995:996892 HCAPLUS Full-text

DN 124:65677

OREF 124:12145a,12148a

TI Removal of organic compounds such as dyes from wastewaters

IN Buschmann, Hans-Juergen; Jonas, Claudia; Saus, Wolfgang

PA Wedeco Umwelttechnologie Wasser-Boden-Luft GmbH, Germany

SO Ger. Offen., 7 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4412320	A1	19951019	DE 1994-4412320	19940411 <
	DE 4412320	C2	19960523		

PRAI DE 1994-4412320

19940411 <--

AB Dyes are removed from wastewaters by sorption on an organic mol. such as the cyclic oligomer of urea, thiourea, urea derivs. and/or thiourea derivs, with dialdehydes and formaldehyde. The oligomer is then treated with ozone to decompose the dyes.

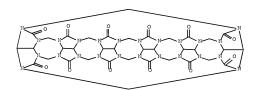
IT 80262-44-8

RL: NUU (Other use, unclassified); USES (Uses) (removal of dyes from wastewaters by sorption with sorbent regeneration)

RN 80262-44-8 HCAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

1H, 4H, 14H, 1/H-2, 16:3, 15-Dimethano5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 19H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
a, 25a, 26a-tetracosaazabispentaleno[1'', 6''', 5''', 6''', 7'']cycloocta[1'', 2''
, 3'':3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-gh:1', 2', 3'g'h']cycloocta[1, 2, 3-cd:5, 6, 7-c'd']dipentalene1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone, dodecahydro- (CA INDEX NAME)



OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 33 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 1994:90694 HCAPLUS Full-text

DN 120:90694

OREF 120:15980h,15981a

TI Photosensitive materials containing photosensitive microcapsules

IN Asakura, Tetsuya; Hirai, Hiroyuki

PA Fuji Photo Film Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	JP 05210238	A	19930820	JP 1992-38336	19920130 <	
PRAI	JP 1992-38336		19920130	<		

AB The title materials, having microcapsules prepared by coating a core containing photosensitive hg halides, reducing agents, and polymerizing compds. With an aldehyde polycondensation resin shell on a support, contain a glycoluril compound The materials may be heat-developable and contain a base precursor and are imagewise exposed and then heat-treated to polymerize the polymerizing compds. to form images. The vaporization of aldehyde from the materials is reduced. The compound I is used as an aldehyde scavenger.

IT 87642-01-1

RL: USES (Uses)
(aldehyde scavenger, for thermally developable silver halide photoimaging compns.)

RN 87642-01-1 HCAPLUS

CN Imidazo[4,5-d]imidazole-2,5(1H,3H)-dione,

1,1'-(1,3-propanediyl)bis[tetrahydro- (CA INDEX NAME)

- L45 ANSWER 34 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN
- AN 1993:263788 HCAPLUS Full-text
- DN 118:263788
- OREF 118:45688h,45689a
- TI Silver halide color photographic material
- IN Obayashi, Keiji; Kamio, Takayoshi
- PA Fuji Photo Film Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 115 pp.
- CODEN: JKXXAF

  T Patent
- DT Patent
- LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05002249	A	19930108	JP 1991-236826	19910826 <
PRAI	JP 1991-112122	A1	19910418	<	

- GI For diagram(s), see printed CA Issue.
- AB The title material contains a yellow coupler represented by X1X2NCOCHZCONHY or I. For X1X2NCOCHZCONHY and I, X1, X2 = alkyl, aryl, or heterocyclic ring; X3
  - = organic residue which, together with N, forms a N-containing heterocyclic

298

ring; Y = aryl, heterocyclic ring; Z = group to be released at the time of coupling reaction with an oxidized developing agent. The title material also contains a scavenger for oxidized developing agents and formaldehyde. title material shows high sensitivity and gives high-quality images.

97642-00-0 RL: USES (Uses)

(scavenger, for formaldehyde in photog. materials)

87642-00-0 HCAPLUS RN

Imidazo[4,5-d]imidazole-2,5(1H,3H)-dione,

1,1'-(1,2-ethanedivl)bis(tetrahvdro- (CA INDEX NAME)

L45 ANSWER 35 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 1991:253475 HCAPLUS Full-text

DN 114:253475

OREF 114:42670h,42671a

TΙ Removal of organic and inorganic compounds from process waters, especially dves and metals in the textile industry

IN Buschmann, Hans Juergen; Fink, Harald

PA Deutsches Textilforschungszentrum Nord-West e.V., Germany

SO Ger. Offen., 10 pp. CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

AR

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4001139	A1	19901025	DE 1990-4001139	19900117 <
	DE 4001139	C2	20030417		
PRAI	DE 1989-3912784	A1	19890419	<	

Cyclic oligomers which are prepared by condensation of urea, thiourea, and their derivs. with glyoxal, dialdehyde, and/or formaldehyde, are effective for removal of organic and inorg, compds, from wastewaters, especially for removal of dissolved, dispersed, or emulsified compds. with hydrophobic constituents as well as dyes and heavy metal salts. The resulting complexes are removed, then the water is diluted or treated by ion exchange to decrease the salt content. The oligomeric complexing agents can be attached to insol. supports (alumina, silica gel, kieselguhr) for easy recovery.

80262-44-8

RL: PROC (Process)

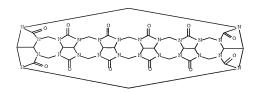
(complexing agent, for wastewater treatment)

RN 80262-44-8 HCAPLUS

1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-

5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24 a,25a,26a-tetracosaazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2''

,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro- (CA INDEX NAME)



OSC.G THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS) RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 36 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 1983:622299 HCAPLUS Full-text

DN 99:222299

OREF 99:34033a,34036a

ΤI Color photographic silver halide materials

IN Kobayashi, Hidetoshi; Watanabe, Toshiyuki; Adachi, Keiichi; Ogawa, Tadashi

PA Fuji Photo Film Co., Ltd. , Japan

SO Ger. Offen., 77 pp.

CODEN: GWXXBX DT Patent

LA German

GI

FAN.	CNT 1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3241087	A1	19830519	DE 1982-3241087	19821106 <
	DE 3241087	C2	19910110		
	JP 58079248	A	19830513	JP 1981-177989	19811106 <
	JP 63032378	В	19880629		
	GB 2111230	A	19830629	GB 1982-31700	19821105 <
	GB 2111230	В	19850220		
	US 4411987	A	19831025	US 1982-440044	19821108 <
PRAI	JP 1981-177989	A	19811106	<	
PRAI	GB 2111230 US 4411987	B A	19850220 19831025	US 1982-440044	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 99:222299

$$\circ \underbrace{ \underset{\mathbb{R}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}}{\overset{\mathbb{R}^3}}}{\overset{\mathbb{R}^3}}}{\overset{\mathbb{R}^3}}}{\overset{\mathbb{R}^3}}{\overset{\mathbb{R}^3}}}{\overset{\mathbb$$

AB Water-soluble glycolurils (1; R, R1, R2 = H, alkyl, alkenyl, aralkyl, aryl, or acyl; R3, R4 = H or alkyl) or polymers thereof are described for use as aldehyde gas scavengers in color photog, materials. These compds. are incorporated in an underlayer, protective layer, interlayer, filler layer, antihalation layer, or other layer at 0.01-5 g/m2. Thus, a subbed cellulose acetate support was coated with a green-sensitive gelatin-Ag(Br,I) emulsion containing a magenta coupler and then with a protective layer containing gelatin 1.5 and I (R, R2, R3, R4 = H; R1 = Me) (II) 0.6 g/m2. The resultant film was then exposed, color developed, bleached, washed, fixed, washed, and stabilized to give a magenta image which was then exposed to HCHO to show a decrease in d. of 5% vs. 40% for a II-free control.

IT 87642-00-0 87642-01-1

RL: DEV (Device component use); USES (Uses)

(color photog. films containing, as formaldehyde gas scavenger)

RN 87642-00-0 HCAPLUS

Imidazo[4,5-d]imidazole-2,5(1H,3H)-dione,

1,1'-(1,2-ethanedivl)bis[tetrahvdro- (CA INDEX NAME)

RN 87642-01-1 HCAPLUS

CN Imidazo[4,5-d]imidazole-2,5(1H,3H)-dione,
1,1'-(1,3-propanediyl)bis[tetrahydro- (CA INDEX NAME)

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 37 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 1976:45277 HCAPLUS Full-text

DN 84:45277

OREF 84:7449a,7452a

TI Antioxidants for polymers and lard

N Minogawa, Motonobu; Nakahara, Yutaka; Nonoyama, Masahiro

- Adeka Argus Chemical Co., Ltd., Japan PA
- SO Jpn. Kokai Tokkyo Koho, 13 pp. CODEN: JKXXAF
- Patent
- LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 50106881	A	19750822	JP 1974-12526	19740130 <
	JP 56005280	В	19810204		
PRAI	JP 1974-12526	A	19740130	<	

- GI For diagram(s), see printed CA Issue.
- Mercaptopropionate and thiodipropionate esters were used as antioxidants for polymers and lard. For example, tris(2-hydroxyethyl) isocyanurate [839-90-7] was esterified with 3-(dodecylthio)propionic acid [1462-52-8] in benzene in the presence of p-toluenesulfonic acid to give I [57898-42-7] also prepared were, e.g., II [57898-43-8] and III [57898-44-9]. Polypropylene [9003-07-0] containing 0.1 phr Goodrite 3114 and 0.3 phr I had oxidation resistance (160°, 1 atm 0) 15,300 min, compared with 420 min for composition not containing I. IT
- 57993-77-8 RL: USES (Uses)

(antioxidants, for polymers and lard)

- 57993-77-8 HCAPLUS
- CN Propanoic acid, 3,3'-thiobis-, bis[2-[4,6-bis[2-[3-(dodecylthio)-1oxopropoxy]ethyl]hexahydro-2,5-dioxoimidazo[4,5-d]imidazol-1(2H)-yl]ethyl] ester (9CI) (CA INDEX NAME)

PAGE 1-B

- CH2-C=0 Ĺ<sub>H2</sub> L<sub>H2</sub>

PAGE 2-A

PAGE 2-B

## OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L45 ANSWER 38 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

1964:462118 HCAPLUS Full-text AN

DN 61:62118

OREF 61:10815d-g

TI Dyes containing glyoxaldiureine groups

PA Durand & Huguenin A.-G.

SO 5 pp.

DT Patent

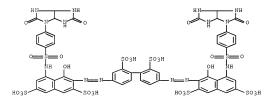
Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 1348381		19640110	FR 1962-906021	19620803 <
	GB 1012487			GB	
	GB 970442			GB	
PRAI	CH		19610803	<	

For diagram(s), see printed CA Issue.

- AΒ Compds. of the general formula I, where R and R' can be p-sulfamovlphenvl groups (with anthraguinone or azonaphthol dve residues attached to the N), are prepared and treated with HCHO to give dyes which yield fast shades on cotton. Thus, a solution of PhNHCONH2 136 in H2O 800 and 38% HCl 28 is treated with glyoxalmonoureine 137 for 15 min. at 95° to give 207 parts Nphenylglyoxaldiureine (II). A mixture of II 109 and ClSO3H 700 parts is stirred for 3 hrs. at room temperature and 3 hrs. at 40° to give N-(4chlorosulfonylphenyl)glyoxaldiureine (III) A solution of 3-methyl-4-(4,8disulfo-2-naphthylazo)aniline 84 and NaOAc 100 in H2O 100 parts is treated with III (prepared from II 88 parts) to give I [R = H, R' = p-[N-[3-methyl-4-(4,8-disulfo-2-naphthylazo)phenyl]sulfamoyl]phenyl] which is treated with HCHO to give a trimethylol derivative, yellow on cotton. Similarly prepared are polymethylolated IV (violet red shades on cotton) and the following methylolated I (R, R', and shade on cotton given): H, p-[N-[2-sulfo-4-(1amino-2-sulfo-4- anthraquinonylamino)phenyl]sulfamoyl]benzyl, blue; H, p-[N-[3- sulfo-5-(2-amino-6-sulfo-8-hydroxy-1-naphthylazo)phenyl]sulfamoyl]phenyl, bluish red. Also prepared is I [R = R' = p-[N][2 - (2,5 - disulfophenylazo) -1 - hydroxy - 3- sulfo- 7- naphthyl] sulfamoyl]phenyl], orange on cotton.
- ΙT 856614-19-2, 2,2'-Biphenyldisulfonic acid, 4, 4'-bis[[8-[p-(hexahydro-2,5-dioxoimidazo[4,5-d]imidazol-1(2H)
  - v1) benzenesulfonamido]-1-hvdroxv-3,6-disulfo-2-naphthv1]azo]-(poly(hydroxymethyl) derivative)
- RN 856614-19-2 HCAPLUS
- CN 2,2'-Biphenyldisulfonic acid, 4,4'-bis[[8-[p-(hexahydro-2,5dioxoimidazo[4,5-d]imidazol-1(2H)-yl)benzenesulfonamido]-1-hydroxy-3,6disulfo-2-naphthyl]azo]- (7CI) (CA INDEX NAME)



- L45 ANSWER 39 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN
- 1962:483828 HCAPLUS Full-text AN
- DN 57:83828
- OREF 57:16799c-a
- TT Benzothiazole water-insoluble monoazo dyes
- IN Fishwick, Brian R.
- PA Imperial Chemical Industries Ltd.

SO 5 pp.

Patent

Unavailable LA

FAN.CNT 1

AB

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 908656		19621024	GB 1958-38962	19581203 <
PRAI	GB		19581203	<	

For diagram(s), see printed CA Issue.

Water-insol. monoazo dves of the general formula I are described for the dyeing of artificial fibers in red shades of high light-fastness. In I, nucleus B may have a halogen atom, R and R' are CH2CH2CN or CH2CH2CO2Me. The benzothiazoles are prepared by ring closure of the appropriate phenylthioureas. Thus, 5.14 parts 2-amino-6-dimethyl-sulfamoylbenzothiazole (II) was diazotized and coupled with 3.98 parts PhN(CH2CH2CN)2 to give a dye, which when milled with aqueous di-Na dinaphthylmethanedisulfonate colors cellulose acetate in brilliant scarlet shades of excellent lightfastness. Similarly, diazotized II and PhN(CH2CH2CO2Me)2 give a red dye. The following benzothiazole derivs. were prepared (substituents, m.p., reagents given): 2-NH2-6-MeNHSO2, 229-30°, Br, 4-H2NC6H4SO2NHMe, and KSCN; 2-NH2-6-HOCH2CH2NHSO2, 194°, Br, 4-H2NC6H4SO2NHCH2CH2OH, and KSCN; and 2-NH2-6-iso-PrNHSO2, 214-15° Br, 4-H2NC6SO2NH-iso-Pr, and KSCN, Iso-PrNH2 and 4-AcNHC6H4SO2Cl gave 4-AcNHC6H4SO2NH-iso-Pr, m. 160.5-2.5°, which was hydrolyzed to 4-iso-Pr-NHSO2C6H4NH2, m. 116.5-17°. 2-O2NC6H4SO2Cl and Me2NH gave 2-O2NC6H4SO2NMe2 which was reduced and treated with BzSCN to give 2-Me2NSO2C6H4NHC(:S)NHBz, m. 157.5-8°, which was treated with Br in CHCl3 to give the 4-Me2NSO2 analog, m. 284°, of II. Similarly was prepared the 4-chloro derivative, m. 251-2°, of II from 3,4-Cl2C6H3SO2NMe2 (III), m. 127-8°; then the 4-NH2 analog, m. 174-5° of III; then 2,4-C1(Me2NSO2)C6H3NHC(:S)NHBz, m. 196-7°, then 2,4-C1(Me2NSO2)C6H3NHC(:S)NH2, m. 150-1°.

103760-66-3

RN

(Derived from data in the 7th Collective Formula Index (1962-1966)) 103760-66-3 HCAPLUS

CN 2-Naphthalenesulfonic acid, 6-[hexahydro-3,4,6-tris(hydroxymethyl)-2,5dioxoimidazo[4,5-d]imidazol-1(2H)-yl]-3-[2-[4-[hexahydro-3,4,6tris(hydroxymethyl)-2,5-dioxoimidazo[4,5-d]imidazol-1(2H)yl]phenyl]diazenyl]-4-hydroxy- (CA INDEX NAME)

- L45 ANSWER 40 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN
- AN 1962:483827 HCAPLUS Full-text
- DN 57:83827
- OREF 57:16798h-i,16799a-c
- Water-soluble dves containing sulfonic acid and methylol groups
- IN Lange, Guenter; Krehbiel, Guenter; Kohler, Fritz; Grasshoff, Hans J.
- PA Badische Anilin- & Soda-Fabrik A.-G.

SO 7 pp.

Patent

LA Unavailable

FAN.CNT 1

AB

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 900764		19620711	GB 1960-20433	19600610 <
	DE 1153839			DE	
	US 3117961		1964	US	<
PRA	I DE		19590611	<	

GI For diagram(s), see printed CA Issue.

Cotton dyes of the formula I, in which D is the residue of an azo or anthraquinone dye, m is 1-2, and n is 1-3 have excellent fastness properties. They are prepared by conventional methods. Thus, 23.3 parts N-(4aminophenyl)qlyoxaldiureine (II) is diazotized and coupled with 22.4 parts 2,5-HOC10H6SO3H. The product is salted out, filtered, stirred as an aqueous paste for 20 hrs. at room temperature with 15% aqueous HCHO 100 and NaOH 2 parts. The brilliant red dye is salted out, filtered, and dried at 40-50° in vacuo. Glyoxalmonoureine di-Me ether (IIa) (0.9 part) is dissolved at 85° in a solution of 4-AcNHC6H4NHCONH2 1 in 3% AcOH 30, concentrated HCl 0.6 part is added, the solution is heated at 85° for 20 min., and cooled to give 1.2 parts N-(4-acetamidophenyl)glyoxaldiureine (III). The hydrolysis of III with 4% aqueous NaOH yields 0.5 part II. Other dyes are prepared similarly (reactants, shade on cotton given): N-(4-amino-3-sulfophenyl)glyoxaldiureine (IV), 2,7-HOC10H6SO3H, brilliant red; IV, 1-(2-chloro-5-sulfophenyl)-3-methyl-5-pyrazolone, brilliant red; 4-H2NC6H4SO3H, N-(4-hydroxyphenyl)glyoxaldiureine (V), yellow; 2-H2NC6H4CO2H, N-(8- hydroxy-6-sulfo-2-naphthyl)glyoxaldiureine (VI), orange-red; II, VI, brilliant red; 4-O2NC6H4NH2 → H acid, IV, navv blue; 2,4-HO(O2N)C6H3NH2, V (Cr complex), brown. Similarly, 1-amino-4-(4ureidoanilino)-2-anthraquinonesulfonic acid and IIa gave a brilliant blue dye.

103760-66-3P, 2-Naphthalenesulfonic acid, 6-[hexahydro-3,4,6-tris(hydroxymethyl)-2,5-dioxoimidazo[4,5-d]imidazol-1(2H)-y1]-3-[[p-[hexahydro-3,4,6-tris(hydroxymethy1)-2,5-dioxoimidazo[4,5d]imidazol-1(2H)-yl]phenyl]azo]-4-hydroxy-RL: PREP (Preparation)

(preparation of)

103760-66-3 HCAPLUS RN

CN 2-Naphthalenesulfonic acid, 6-[hexahydro-3,4,6-tris(hydroxymethyl)-2,5dioxoimidazo[4,5-d]imidazol-1(2H)-yl]-3-[2-[4-[hexahydro-3,4,6tris(hydroxymethyl)-2,5-dioxoimidazo[4,5-d]imidazol-1(2H)vllphenvlldiazenvll-4-hvdroxv- (CA INDEX NAME)

L45 ANSWER 41 OF 41 HCAPLUS COPYRIGHT 2009 ACS on STN

AN 1961:56819 HCAPLUS Full-text

55:56819

OREF 55:10899c-e

- TI Azo dves
- IN Kohler, Fritz
- PA Badische Anilin- & Soda-Fabrik Akt.-Ges.
- DT FAN.CNT 1
- LA Unavailable

PATENT NO. KIND DATE APPLICATION NO. DATE

PΙ DE 1070760 19591210 DE

H2O-insol. azo pigment dyes, which can be solubilized by HCHO, are prepared by AB treating glyoxalmonoureine (I), with urea derivs. which contain an azo constituent. Thus, 2 parts I is refluxed with 2.4 parts p-ureidoazobenzene and 0.5 part concentrated HCl in 60 parts EtOH for 90 min. to give a dye (II), m. >350°, an orange colored pigment, and insol. in most solvents. Similarly, p,p'-diureidoazobenzene and glyoxalmonoureine di-Me ether give an orange dye. II, treated with HCHO in aqueous NaOH, gives p-[N,N',N''tris(hydroxymethyl)glyoxaldiureine-N'''-yl] azobenzene, m. 90° (approx.).

IT 102077-47-4P, Glycoluril, 1,1'-(azodi-p-phenylene)di-RL: PREP (Preparation)

(preparation of)

102077-47-4 HCAPLUS RN

CN Glycoluril, 1,1'-(azodi-p-phenylene)di- (6CI) (CA INDEX NAME)

osc.g THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

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